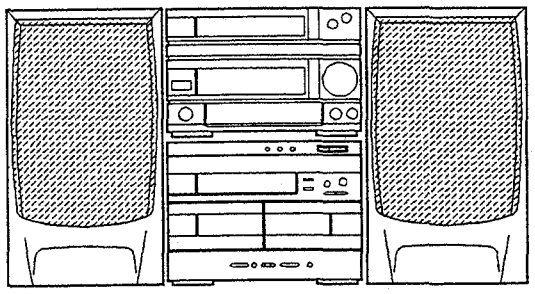
aiwa

aiwa SERVICE

CUD-DN858

SERVICE MANUAL



STEREO RECEIVER
COMPACT DISC/CASSETTE PLAYER

- BASIC TAPE MECHANISM: 2ZM-3PR2N
- BASIC CD MECHANISM: KSM-2101ABM
- TYPE: HE,LH,HK,HR,E,K,U,EZ

SYSTEM	AMPLIFIER/ TUNER	CASSETTE DECK/ CD PLAYER	REMOTE CONTROLLER	SPEAKER
CUD-DN858 (TYPE: HE,LH,HK,HR)	RX-N858	FD-N858	RC-T502	SX-N858
(TYPE: E,K,U,EZ)	RX-N858	FD-N858	RC-T502	SX-N858

S/M Code No. 09-954-094-2FE

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SPECIFICATIONS

TUNER / AMPLIFIER -> RX-N858

<FM section>

Frequency range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	HE,HR,HK,U,LH : 13.2 dBf (75 ohms, 1.2μV) EE,K,EZ : 19.2 dBf (75 ohms, 2.5μV)
Antenna	75 ohms (unbalanced)

<AM section>

Frequency range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	400 μV/m
Antenna	Loop antenna

<MW section> (EE,K,EZ)

Frequency range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	400 μV/m
Antenna	Loop antenna

<LW section>(EE,K,EZ)

Frequency range	144 kHz to 290 kHz
Usable sensitivity	1000 μV/m
Antenna	Loop antenna

<Amplifier section>

Power output

Front :
HR : Rated 45 W + 45 W
(6 ohms, T.H.D. 1%, 1kHz)
Reference 60 W + 60 W
(6 ohms, T.H.D. 10%, 1kHz)
HE,LH,HK :
60 W + 60 W
(6 ohms, T.H.D. 10%, 1kHz)
EE,K,EZ:
Rated 50 W + 50 W
(6 ohms, T.H.D. 1%, 1kHz/DIN 45500)
Reference 65 W + 65 W
(6 ohms, T.H.D. 10%, 1kHz/DIN 45324)
DIN MUSIC POWER 110W + 110W
U :
50watts per channel minimum RMS, both channels driven at 6 ohms

Rear :
HR : Rated 7.5 W + 7.5 W
(16 ohms, T.H.D. 1%, 1kHz)
Reference 10 W + 10 W
(16 ohms, T.H.D. 10%, 1kHz)
HE,LH,HK :
10 W + 10 W
(16 ohms, T.H.D. 10%, 1kHz)
EE,K,EZ :
DIN MUSIC POWER 17.5W + 17.5W
U :
7.5watts per channel minimum RMS, both channels driven at 16 ohms

Center :
HR : Rated 15 W
(8 ohms, T.H.D. 1%, 1kHz)
Reference 20 W
(8 ohms, T.H.D. 10%, 1kHz)
HE,LH,HK :
20 W (8 ohms, T.H.D. 10%, 1kHz)
EE,K,EZ:
DIN MUSIC POWER 35W
U :
15watts minimum RMS, at 16 ohms From 65Hz to 15000hz with no more than 1% total harmonic distortion.

Harmonic distortion 0.1% (25 W, 1 kHz, 6 ohms)

CASSETTE DECK/CD PLAYER -> FD - N858

<Cassette deck section>

Track format	4 tracks, 2 channels
Frequency response	Metal tape : 20 – 17000 Hz CrO_2 tape : 20 – 16000 Hz Normal tape : 20 – 15000 Hz
Signal-to-noise ratio	73 dB (DOLBY C NR ON, metal tape peak level above 5kHz)
Wow and flutter	0.12% (WRMS)
Recording system	AC bias
Heads	DECK 1 : Playback head x 1 DECK 2 : Recording/playback/ erasure head x 1

<CD player section>

Laser	Semiconductor laser (λ =780 nm)
D-A conversion	1-bit dual
Wow and flutter	Unmeasurable
Signal-to-noise ratio	90 dB (1 kHz)
Harmonic distortion	0.03% (1 kHz)

SPEAKER SYSTEM - SX - N858

<Speaker system>

Cabinet type	3 way, bass reflex (magnetism sealed type)
Speaker	140 mm (5⅝ in.) cone type woofer 60 mm (2⅜ in.) cone type tweeter 20 mm (13/16 in.) ceramic type super tweeter
Impedance	6 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	230 x 396 x 275 mm (9⅛ x 15⅝ x 10⅞ in.)
Weight	4.4 kg (9 lbs. 11oz)

<Common section>

Outputs	Speakers : accept speakers of 6 ohms or more Center speaker : accept speakers of 8 ohms or more Surround speaker : accept speakers of 16 ohms or more Super woofer : 1.5V
Inputs	VIDEO 1/DAT : 300mV (47kohms with volume) VIDEO 2/AUX : 500mV (47kohms with volume)
Power requirements	HE,HR,LH,HK : AC 120V/ 220V-230V/ 240 V, switchable, 50/60 Hz EE,K,EZ: AC 230 V, 50 Hz U : 120V AC, 60 Hz
Power consumption (System total)	HE,LH,HK : 120 W (system total 140 W) HR : 140 W (system total 165 W) EE,K,EZ : 280 W (system total 310 W) U : 125 W (system total 140 W)
Dimensions (W x H x D)	RX-N858 : 260 x 198 x 330.5 mm (10¼ x 7⅞ x 13 in.) FD-N858 : 260 x 198 x 328 mm (10¼ x 7⅞ x 13 in.)
Weight	RX-N858 : 7.0 kg (15 lbs. 7 oz) FD-N858 : 4.5 kg (9 lbs. 15 oz)

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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MODEL NO.

RX-N858

ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	85-NT1-613-010		IC,CXP82532-123Q
	82-NE6-617-019		IC,GP1U581X
	87-002-950-019		IC,BA3826S
	87-002-412-080		IC,SN74HCOONS
	87-001-607-089		IC,NJM4558M
	87-017-375-089		IC,TC4094BF
	87-017-726-089		IC,BU4052 BCF
	87-001-582-019		IC,STK4152-2
	87-017-449-010		IC,XR-1071CP
	87-070-249-040		IC,NJU7305M
	87-070-229-049		IC,M5229FP
	87-017-915-089		IC,BU4094BCF
	87-017-296-189		IC,LA1831M
	87-017-885-010		IC,NJM2177AF
	87-001-927-089		IC,LC7218M
	87-070-205-019		IC,TC9299P
	87-002-872-080		IC,MC14053 BF
	87-070-184-040		IC,M65846FP-600D
	87-070-283-040		IC,NJM2121M
TRANSISTOR			
	89-420-052-089		TR,2SD2005Q (T105)
	87-026-235-089		C-TR,DTC114EK
	89-112-965-089		TR,2SA1296GR
	89-327-125-089		C-TR,2SC2712GR
	89-111-625-089		C-TR,2SA1162GR
	89-213-702-019		TR,2SB1370E
	89-332-665-089		TR,2SC3266GR
	89-110-155-089		TR,2SA1015GR
	87-026-462-089		TR,2SC1740S (RS)
	89-318-155-089		TR,2SC1815GR
	87-026-227-089		C-TR,DTA114EK
	89-333-266-089		C-TR,2SC3326B
	89-113-187-889		TR,2SA1318 TU
	89-333-317-889		TR,2SC3331 TU
	89-503-602-089		C-FET,2SK360E
	89-327-143-089		C-TR,2SC2714 (O)
	87-026-233-089		TR,DTA114TK
	89-502-094-089		C-FET,2SK 209Y
	87-026-229-089		C-TR,DTA143XK
	87-026-230-089		C-TR,DTA114YK<EXCEPT HE,LH,HK>
	87-026-224-089		C-TR,DTC143XK<EXCEPT HE,LH,HK>
	87-026-213-089		C-TR,DTC114YK<EXCEPT HE,LH,HK>
DIODE			
	87-020-691-089		DIODE,1SS132 T-72
	87-001-911-089		ZENER,UTZJ4.7A (TAPG)
	87-001-290-089		ZENER,HZS6B1L
	87-017-101-089		ZENER HZS6C2
	87-002-430-089		ZENER,UTZJ8.2C
	87-002-225-019		DIODE DBF 40C-K10
	87-020-125-089		C-DIODE,1SS181
	87-020-027-089		C-DIODE,1SS184
	87-020-285-019		DIODE DBA30C-K12
	87-001-574-089		DIODE 1SR139-200 T31
	87-002-743-089		ZENER,MTZJ 33B
	87-001-916-089		ZENER UTZJ10B
	87-027-405-089		ZENER,RD2.2EB
	87-001-915-089		ZENER UTZJ6.8A
	87-026-360-089		C-VARICAP,KV1430
	87-020-339-089		C-DIODE,1SS226<<K,EE,EEZ,EZ>
	87-017-097-089		ZENER,HZS6B1
	87-017-121-089		ZENER,HZS11A1
	87-001-913-089		ZENER UTZJ5.6B
	87-001-912-089		ZENER,UTZJ 5.1B
MAIN C.B			
	81-653-648-119		ANT TERM EARTH PAL<K,EE,EEZ,EZ>
	81-653-638-019		ANT TERMINAL EARTH<HE,LH,HK,U,HR>
C109	87-016-476-099		CAP,E 4700-42 (105)<EXCEPT U>
C110	87-016-457-099		CAP,E 4700-42
C111	87-010-101-089		CAP,E 220-16 SME
C112	87-016-130-089		ELECT CAP 47-25 KME<EXCEPT U>
C113	87-010-263-089		CAP,E 100-10
C114	87-015-914-089		CAP,E 47-100
C115	87-010-247-089		CAP,E 100-50 SME
C116	87-010-247-089		CAP,E 100-50 SME
C117	87-010-400-089		CAP,E 0.47-50 SME
C118	87-010-401-089		CAP,E 1-50 SME
C119	87-010-544-089		CAP,E 0.1-50
C120	87-010-235-089		CAP,E 470-16 SME
C121	87-010-480-089		CAP,E 220-16 105 KME<HE,LH,HK>
C121	87-010-101-089		CAP,E 220-16 SME<EXCEPT HE,LH,HK>
C122	87-010-374-089		CAP,E 47-10
C123	87-010-374-089		CAP,E 47-10
C124	87-016-130-089		ELECT CAP 47-25 KME
C126	87-012-140-089		C-CAP,S 470P-50 CH
C127	87-016-110-099		CAP,E 5600-25SME
C128	87-010-374-089		CAP,E 47-10<HE,LH,HK,U>
C128	87-016-130-089		ELECT CAP 47-25 KME<K,EE,EEZ,EZ,HR>
C129	87-010-404-089		CAP,E 4.7-50 SME
C131	87-018-131-089		CAP,TC-U 1000P-50 B
C132	87-018-209-089		CAP,TC-U 0.1-50 F
C151	87-016-539-099		CAP,E 3300-35 SMG
C152	87-016-538-099		CAP,E 3300-35 KME<EXCEPT U>
C153	87-012-368-089		C-CAP S 0.1-50F
C154	87-012-368-089		C-CAP S 0.1-50F
C155	87-012-368-089		C-CAP S 0.1-50F<K,EE,EEZ,EZ>
C156	87-012-368-089		C-CAP S 0.1-50F<K,EE,EEZ,EZ>
C201	87-010-401-089		CAP,E 1-50 SME
C202	87-010-401-089		CAP,E 1-50 SME
C203	87-010-401-089		CAP,E 1-50 SME
C204	87-010-401-089		CAP,E 1-50 SME
C205	87-010-403-089		CAP,E 3.3-50 SME
C206	87-010-403-089		CAP,E 3.3-50 SME
C207	87-010-380-089		CAP,E 47-16 SME
C208	87-010-380-089		CAP,E 47-16 SME
C209	87-010-401-089		CAP,E 1-50 SME
C210	87-010-401-089		CAP,E 1-50 SME
C211	87-010-402-089		CAP,E 2.2-50 SME
C212	87-010-402-089		CAP,E 2.2-50 SME
C213	87-010-402-089		CAP,E 2.2-50 SME
C214	87-010-402-089		CAP,E 2.2-50 SME
C215	87-010-178-089		C-CAP,S 1000P-50 B
C216	87-010-178-089		C-CAP,S 1000P-50 B
C217	87-010-400-089		CAP,E 0.47-50 SME<EXCEPT U>
C218	87-010-400-089		CAP,E 0.47-50 SME<EXCEPT U>
C219	87-010-405-089		CAP,E 10-50 SME
C220	87-010-405-089		CAP,E 10-50 SME
C221	87-010-374-089		CAP,E 47-10
C222	87-010-374-089		CAP,E 47-10
C223	87-010-315-089		C-CAP,S 27P-50 CH
C224	87-010-315-089		C-CAP,S 27P-50 CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C225	87-010-260-089		CAP,E 47-25 SME
C226	87-010-260-089		CAP,E 47-25 SME
C229	87-016-247-089		C-CAP,0.1-50 F
C230	87-016-247-089		C-CAP,0.1-50 F
C231	87-010-184-089		C-CAP,S 3300P-50 B<K,EE,EEZ,EZ>
C232	87-010-184-089		C-CAP,S 3300P-50 B<K,EE,EEZ,EZ>
C233	87-010-196-089		C-CAP,S 0.1-25 F<K,EE,EEZ,EZ>
C234	87-010-196-089		C-CAP,S 0.1-25 F<K,EE,EEZ,EZ>
C235	87-010-405-089		CAP,E 10-50 SME
C236	87-010-197-089		C-CAP,S 0.01-25 B
C237	87-010-197-089		C-CAP,S 0.01-25 B
C238	87-010-197-089		C-CAP,S 0.01-25 B<K,EE,EEZ,EZ>
C239	87-010-197-089		C-CAP,S 0.01-25 B
C241	87-010-178-089		C-CAP,S 1000P-50 B
C242	87-010-178-089		C-CAP,S 1000P-50 B
C246	87-010-406-089		CAP,E 22-50 SME
C247	87-010-406-089		CAP,E 22-50 SME
C248	87-016-148-089		CAP,E 47-50KME<EXCEPT U>
C249	87-010-198-089		C-CAP,S 0.022-25 B
C250	87-010-196-089		C-CAP,S 0.1-25 F<K,EE,EEZ,EZ>
C251	87-010-197-089		C-CAP,S 0.01-25 B
C253	87-018-134-089		CAP,TC-U 0.01-16 Y
C264	87-010-178-089		C-CAP,S 1000P-50 B
C301	87-010-405-089		CAP,E 10-50 SME
C302	87-010-405-089		CAP,E 10-50 SME
C303	87-010-405-089		CAP,E 10-50 SME
C304	87-010-405-089		CAP,E 10-50 SME
C305	87-010-182-089		C-CAP,S 2200P-50 B
C307	87-010-182-089		C-CAP,S 2200P-50 B
C309	87-010-189-089		C-CAP,S 8200P-50 B
C311	87-010-189-089		C-CAP,S 8200P-50 B
C313	87-010-189-089		C-CAP,S 8200P-50 B
C315	87-010-186-089		C-CAP,S 4700P-50 B
C316	87-010-186-089		C-CAP,S 4700P-50 B
C317	87-010-186-089		C-CAP,S 4700P-50 B
C318	87-010-186-089		C-CAP,S 4700P-50 B
C321	87-010-322-089		C-CAP,S 100P-50 CH
C322	87-010-322-089		C-CAP,S 100P-50 CH
C323	87-010-404-089		CAP,E 4.7-50 SME
C324	87-010-404-089		CAP,E 4.7-50 SME
C325	87-010-405-089		CAP,E 10-50 SME
C326	87-010-405-089		CAP,E 10-50 SME
C327	87-010-405-089		CAP,E 10-50 SME
C328	87-010-405-089		CAP,E 10-50 SME
C329	87-010-401-089		CAP,E 1-50 SME
C330	87-010-401-089		CAP,E 1-50 SME
C331	87-010-405-089		CAP,E 10-50 SME
C332	87-010-405-089		CAP,E 10-50 SME
C333	87-010-263-089		CAP,E 100-10
C334	87-010-263-089		CAP,E 100-10
C335	87-010-197-089		C-CAP,S 0.01-25 B
C401	87-010-312-089		C-CAP,S 15P-50 CH
C403	87-010-197-089		C-CAP,S 0.01-25 B
C404	87-010-197-089		C-CAP,S 0.01-25 B
C405	87-010-312-089		C-CAP,S 15P-50 CH
C406	87-010-313-089		C-CAP,S 18P-50 CH<K,EE,EEZ,EZ>
C407	87-010-146-089		C-CAP,S 2P-50 CH<K,EE,EEZ,EZ>
C407	87-010-147-089		C-CAP,S 3P-50 CH<HE,LH,HK,U,HR>
C408	87-010-145-089		C-CAP,S 1P-50 CH<HE,LH,HK,U,HR>
C408	87-010-147-089		C-CAP,S 3P-50 CH<K,EE,EEZ,EZ>
C409	87-010-314-089		C-CAP,S 22P-50 CH
C410	87-010-154-089		C-CAP,S 10P-50 CH
C411	87-010-312-089		C-CAP,S 15P-50 CH
C412	87-010-312-089		C-CAP,S 15P-50 CH
C413	87-010-197-089		C-CAP,S 0.01-25 B
C414	87-010-146-089		C-CAP,S 2P-50 CH
C415	87-010-147-089		C-CAP,S 3P-50 CH<K,EE,EEZ,EZ>
C416	87-010-154-089		C-CAP,S 10P-50 CH
C417	87-010-197-089		C-CAP,S 0.01-25 B
C418	87-012-156-089		C-CAP,S220P CH
C419	87-010-197-089		C-CAP,S 0.01-25 B
C422	87-010-149-089		C-CAP,S 5P-50 CH
C423	87-010-400-089		CAP,E 0.47-50 SME
C451	87-010-316-089		C-CAP,S 33P-50 CH<K,EE,EEZ,EZ>
C452	87-010-197-089		C-CAP,S 0.01-25 B
C453	87-015-691-089		CAP,E 0.1-50 7L
C454	87-010-154-089		C-CAP,S 10P-50 CH<HE,LH,HK,U,HK>
C454	87-010-314-089		C-CAP,S 22P-50 CH<K,EE,EEZ,EZ>
C455	87-012-140-089		C-CAP,S 470P-50 CH<K,EE,EEZ,EZ>
C456	87-012-155-089		C-CAP,S 180P-50 CH<K,EE,EEZ,EZ>
C457	87-010-175-089		C-CAP,S 560P-50 SL<K,EE,EEZ,EZ>
C458	87-010-197-089		C-CAP,S 0.01-25 B<K,EE,EEZ,EZ>
C459	87-010-197-089		C-CAP,S 0.01-25 B<K,EE,EEZ,EZ>
C460	87-010-197-089		C-CAP,S 0.01-25 B
C471	87-010-197-089		C-CAP,S 0.01-25 B
C472	87-010-197-089		C-CAP,S 0.01-25 B<EXCEPT U>
C473	87-010-197-089		C-CAP,S 0.01-25 B
C474	87-010-197-089		C-CAP,S 0.01-25 B
C475	87-015-785-089		C-CAP,0.1-25 F<HE,LH,HK,U,HR>
C475	87-010-452-089		C-CAP,1-16F<K,EE,EEZ,EZ>
C477	87-010-197-089		C-CAP,S 0.01-25 B
C479	87-015-819-089		CHIP CAP 0.01
C482	87-018-134-089		CAP,TC-U 0.01-16 Y<K,EE,EEZ,EZ>
C501	87-010-197-089		C-CAP,S 0.01-25 B
C502	87-010-197-089		C-CAP,S 0.01-25 B
C503	87-010-405-089		CAP,E 10-50 SME
C504	87-010-194-089		C-CAP,S 0.047-25 F
C505	87-010-401-089		CAP,E 1-50 SME
C506	87-010-402-089		CAP,E 2.2-50 SME
C507	87-010-178-089		C-CAP,S 1000P-50 B
C508	87-010-314-089		C-CAP,S 22P-50 CH
C509	87-010-403-089		CAP,E 3.3-50 SME
C510	87-010-405-089		CAP,E 10-50 SME
C511	87-010-194-089		C-CAP,S 0.047-25 F
C512	87-010-213-089		C-CAP,S 0.015-50 B
C513	87-010-178-089		C-CAP,S 1000P-50 B<HE,LH,HK,U,HR>
C513	87-012-157-089		C-CAP,S 330P-50 CH<K,EE,EEZ,EZ>
C514	87-010-401-089		CAP,E 1-50 SME
C515	87-010-426-089		C-CAP,S 0.012-25 B<EXCEPT LH,U>
C515	87-010-220-089		C-CAP,S 0.018-25 B<LH,U>
C516	87-010-426-089		C-CAP,S 0.012-25 B<EXCEPT LH,U>
C516	87-010-220-089		C-CAP,S 0.018-25 B<LH,U>
C517	87-010-401-089		CAP,E 1-50 SME
C518	87-010-263-089		CAP,E 100-10
C519	87-010-194-089		C-CAP,S 0.047-25 F
C520	87-010-403-089		CAP,E 3.3-50 SME
C521	87-010-403-089		CAP,E 3.3-50 SME
C525	87-010-197-089		C-CAP,S 0.01-25 B
C541	87-010-197-089		C-CAP,S 0.01-25 B<HE,LH,HK,U,HR>
C551	87-010-186-089		C-CAP,S 4700P-50 B
C552	87-010-400-089		CAP,E 0.47-50 SME
C553	87-010-384-089		CAP,E 100-25 SME
C554	87-010-315-089		C-CAP,S 27P-50 CH
C555	87-010-263-089		CAP,E 100-10
C556	87-010-197-089		C-CAP,S 0.01-25 B
C557	87-010-178-089		C-CAP,S 1000P-50 B
C558	87-010-178-089		C-CAP,S 1000P-50 B
C559	87-010-178-089		C-CAP,S 1000P-50 B
C560	87-010-178-089		C-CAP,S 1000P-50 B
C564	87-010-314-089		C-CAP,S 22P-50 CH
C571	87-010-179-089		C-CAP,S 1200P-50 B<K,EE,EEZ,EZ>
C572	87-010-403-089		CAP,E 3.3-50 SME<K,EE,EEZ,EZ>
C601	87-010-263-089		CAP,E 100-10
C602	87-010-263-089		CAP,E 100-10
C603	87-010-260-089		CAP,E 47-25 SME
C604	87-010-263-089		CAP,E 100-10
C605	87-010-401-089		CAP,E 1-50 SME
C606	87-010-401-089		CAP,E 1-50 SME
C607	87-010-182-089		C-CAP,S 2200P-50 B
C608	87-010-182-089		C-CAP,S 2200P-50 B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C609	87-010-184-089		C-CAP,S 3300P-50 B
C610	87-010-184-089		C-CAP,S 3300P-50 B
C851	87-010-260-089		CAP,E 47-25 SME<EXCEPT LH,HE,HK>
C852	87-010-404-089		CAP,E 4.7-50 SME<EXCEPT LH,HE,HK>
C853	87-010-405-089		CAP,E 10-50 SME<EXCEPT LH,HE,HK>
C854	87-010-248-089		CAP,E 220-10 SME<EXCEPT LH,HE,HK>
C926	87-010-190-089		C-CAP,S 0.01-50 F
C927	87-010-196-089		C-CAP,S 0.1-25 F
C929	87-010-190-089		C-CAP,S 0.01-50 F
C963	87-010-194-089		C-CAP,S 0.047-25 F<K,EE,EEZ,EZ>
C964	87-010-194-089		C-CAP,S 0.047-25 F<K,EE,EEZ,EZ>
C965	87-010-196-089		C-CAP,S 0.1-25 F<K,EE,EEZ,EZ>
C966	87-018-209-089		CAP,TC-U 0.1-50 F<K,EE,EEZ,EZ>
C967	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C968	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C969	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C970	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C973	87-010-194-089		C-CAP,S 0.047-25 F<K,EE,EEZ,EZ>
C974	87-010-194-089		C-CAP,S 0.047-25 F<K,EE,EEZ,EZ>
C975	87-010-194-089		C-CAP,S 0.047-25 F<K,EE,EEZ,EZ>
C976	87-010-194-089		C-CAP,S 0.047-25 F<K,EE,EEZ,EZ>
C977	87-010-194-089		C-CAP,S 0.047-25 F<K,EE,EEZ,EZ>
C978	87-010-194-089		C-CAP,S 0.047-25 F<K,EE,EEZ,EZ>
C979	87-010-196-089		C-CAP,S 0.1-25 F<K,EE,EEZ,EZ>
C980	87-010-196-089		C-CAP,S 0.1-25 F<K,EE,EEZ,EZ>
C981	87-012-369-089		C-CAP,S,0.047-50 F
C986	87-010-194-089		C-CAP,S 0.047-25 F<K,EE,EEZ,EZ>
C987	87-010-194-089		C-CAP,S 0.047-25 F<K,EE,EEZ,EZ>
CF501	87-008-261-019		FLTR,SFE10.7MA5-A<HE,LH,HK,U,HR>
CF501	87-008-534-019		FLTR,SFE10.7MS3GH-B<K,EE,EEZ,EZ>
CF502	87-008-423-019		CF,SFE10.7 MS3G-A<K,EE,EEZ,EZ>
CF502	87-008-261-019		FLTR,SFE10.7MA5-A<HE,LH,HK,HR>
CF503	87-008-518-019		FLTR,CDA10.7MC-43AAZ<K,EE,EEZ,EZ>
CF503	87-008-500-019		FLTR,CDA10.7MG43A-A<HE,LH,HK,U,HR>
CF504	84-508-618-019		VIB,CER CSB 456 F/5
CON101	87-009-265-019		CONN,11P 52147 MXJ
CON102	87-009-257-019		CONN 3P 52147 MXJ
D451	81-754-634-019		VARI-CAP, KV1260<K,EE,EEZ,EZ>
J202	87-099-715-019		JACK,PIN 2P<HE,LH,HK,U,HR>
J202	87-099-716-019		JACK,PIN 2P W/E<K,EE,EEZ,EZ>
J203	87-033-226-019		TERMINAL,SP 4P (JT)
J204	87-099-606-019		JACK,PIN OR-BK
J301	81-669-655-019		JACK,6.3 W/S AU
J401	81-631-646-019		ANT TERM 2P PAL<K,EE,EEZ,EZ>
J401	87-033-214-019		ANT TERM 4P(JT)<HE,LH,HK,U,HR>
L201	87-003-383-019		COIL,1UH-S<K,EE,EEZ,EZ>
L202	87-003-383-019		COIL,1UH-S<K,EE,EEZ,EZ>
L203	87-003-383-019		COIL,1UH-S<K,EE,EEZ,EZ>
L204	87-003-383-019		COIL,1UH-S<K,EE,EEZ,EZ>
L301	87-003-152-089		COIL,100UH<K,EE,EEZ,EZ>
L302	87-003-152-089		COIL,100UH<K,EE,EEZ,EZ>
L401	87-006-209-019		COIL,ANT FM 3/4 T
L402	87-006-210-019		COIL,ANT FM 2 3/4T
L403	87-006-200-019		COIL, RF FM 3-1/2T,L5
L404	87-006-201-019		COIL,RF FM3-1/2TS, L5
L405	87-006-201-019		COIL,RF FM3-1/2TS, L5<K,EE,EEZ,EZ>
L406	87-006-205-019		COIL,OSC FM (7K)
L407	87-003-231-089		C-COIL,S1UH
L408	87-008-427-019		COIL FMIFT (4T)
L451	82-NT1-685-019		AM PACK 3, S-2NT<HE,LH,HK,U,HR>
L451	87-006-207-019		COIL ANT MW (3B)<K,EE,EEZ,EZ>
L452	87-006-208-019		COIL, ANT LW<K,EE,EEZ,EZ>
L453	82-NT1-685-019		AM PACK 3, S-2NT<HE,LH,HK,U,HR>
L453	82-794-687-019		COIL,OSC<K,EE,EEZ,EZ>
L454	82-794-688-019		COIL,OSC LW<K,EE,EEZ,EZ>
L501	82-NT1-659-019		FILTER,CFAZ-450 2NT
L503	87-003-241-089		C-COIL,S 4.7U
L504	82-NT1-633-019		FLTR AMTI-BIRDIE<K,EE,EEZ,EZ>
L551	87-003-241-089		C-COIL,S 4.7U
L601	81-631-643-019		COIL 1 POLE MPX
L602	81-631-643-019		COIL 1 POLE MPX
L901	87-003-102-089		COIL,10UH<K,EE,EEZ,EZ>
L902	87-003-102-089		COIL,10UH<K,EE,EEZ,EZ>
R107	87-029-016-019		FUSE,RES 22-1/2W FM
R145	87-022-050-089		RESIS METAL 1W-0.22J
R146	87-022-050-089		RESIS METAL 1W-0.22J
R188	87-029-089-099		FUSE,RES 4.7-1/4W FM
R189	87-029-070-099		FUSE,RES 2.2-1/4W FM
R255	87-022-050-089		RESIS METAL 1W-0.22J<EXCEPT U>
R256	87-022-050-089		RESIS METAL 1W-0.22J<EXCEPT U>
R257	87-022-050-089		RESIS METAL 1W-0.22J<EXCEPT U>
R258	87-022-050-089		RESIS METAL 1W-0.22J<EXCEPT U>
R851	87-025-474-089		RES,NF 15-1/4W J<EXCEPT LH,HE,HK>
RY101	87-045-335-010		RELAY,G5Z-2A 12VDC
RY151	87-045-335-010		RELAY,G5Z-2A 12VDC
SF401	87-030-105-010		FLTR,BPMB6A<K,EE,EEZ,EZ>
SFR501	87-021-743-019		SFR,22K DIA6
TC401	87-011-219-089		CAP TRIMMER 10P VCT
TC402	87-011-219-089		CAP TRIMMER 10P VCT
TC403	87-011-219-089		CAP TRIMMER 10P VCT<K,EE,EEZ,EZ>
TC451	87-011-220-089		CAP TRIMMER 20P VCT<K,EE,EEZ,EZ>
TC452	87-011-221-089		TRIMER.30P VCT51<K,EE,EEZ,EZ>
TH851	82-304-722-010		THERMISTA 42D26<EXCEPT LH,HE,HK>
W101	82-NT1-640-119		F-CABLE,7P-2.5
W102	82-NT1-644-019		CORD,FG 15P
WIR1	82-NT1-641-019		F-CABLE 5P-1.25
X551	87-030-299-019		VIB,XTAL 7.2MHZ(KDS)

FRONT C.B

C1	87-010-370-089		CAP,E 330-6.3 SME
C2	87-018-134-089		CAP,TC-U 0.01-16 Y
C3	87-010-197-089		C-CAP,S 0.01-25 B
C4	87-010-405-049		CAP,E 10-50 SME
C5	87-010-182-089		C-CAP,S 2200P-50 B
C6	87-010-182-089		C-CAP,S 2200P-50 B
C7	87-010-178-089		C-CAP,S 1000P-50 B
C8	87-010-404-089		CAP,E 4.7-50 SME
C9	87-010-412-049		CAP,E 10-25 5L
C10	87-010-400-049		CAP,E 0.47-50
C11	87-012-145-089		C-CAP S 270P-50CH
C12	87-010-067-049		CAP,E 0.1-50.5L
C17	87-010-412-049		CAP,E 10-25 5L
C18	87-010-405-049		CAP,E 10-50 SME
C19	87-010-405-049		CAP,E 10-50 SME
C20	87-010-544-049		CAP,E 0.1-50 SME
C23	87-010-197-089		C-CAP,S 0.01-25 B
C40	87-010-405-089		CAP,E 10-50 SME
C41	87-010-405-089		CAP,E 10-50 SME
C42	87-010-405-089		CAP,E 10-50 SME
C62	87-018-209-089		CAP,TC-U 0.1-50 F<K,EE,EEZ,EZ>
C80	87-015-819-089		CHIP CAP 0.01
C101	87-010-179-089		C-CAP,S 1200P-50 B
C102	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C103	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C104	87-010-574-089		C-CAP,S 470P-50 UJ
C105	87-010-405-049		CAP,E 10-50 SME
C107	87-010-405-049		CAP,E 10-50 SME
C108	87-010-405-049		CAP,E 10-50 SME
C131	87-010-196-089		C-CAP,S 0.1-25 F
C133	87-010-196-089		C-CAP,S 0.1-25 F
C134	87-010-197-089		C-CAP,S 0.01-25 B
C135	87-010-322-089		C-CAP,S 100P-50 CH
C136	87-015-819-089		CHIP CAP 0.01
C137	87-010-196-089		C-CAP,S 0.1-25 F
C138	87-018-209-089		CAP,TC-U 0.-50F
C151	87-010-401-089		CAP,E 1-50 SME
C152	87-010-263-089		CAP,E 100-10 SME 5X11
C301	87-010-404-049		CAP,E 4.7-50 SME
C302	87-010-404-049		CAP,E 4.7-50 SME

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C303	87-010-404-049		CAP,E 4.7-50 SME
C304	87-010-404-049		CAP,E 4.7-50 SME
C305	87-010-404-049		CAP,E 4.7-50 SME
C306	87-010-404-049		CAP,E 4.7-50 SME
C307	87-012-140-089		C-CAP,S 470P-50 CH
C308	87-012-140-089		C-CAP,S 470P-50 CH
C309	87-010-184-089		C-CAP,S 3300P-50 B
C310	87-010-184-089		C-CAP,S 3300P-50 B
C311	87-010-197-089		C-CAP,S 0.01-25 B
C312	87-010-197-089		C-CAP,S 0.01-25 B
C313	87-010-178-089		C-CAP,S 1000P-50 B
C314	87-010-178-089		C-CAP,S 1000P-50 B
C315	87-010-184-089		C-CAP,S 3300P-50 B
C316	87-010-184-089		C-CAP,S 3300P-50 B
C317	87-010-213-089		C-CAP,S 0.015-50 B
C318	87-010-213-089		C-CAP,S 0.015-50 B
C319	87-010-189-089		C-CAP,S 8200P-50 B
C320	87-010-189-089		C-CAP,S 8200P-50 B
C321	87-010-194-089		C-CAP,S 0.047-25 F
C322	87-010-194-089		C-CAP,S 0.047-25 F
C323	87-010-198-089		C-CAP,S 0.022-25 B
C324	87-010-198-089		C-CAP,S 0.022-25 B
C325	87-010-544-049		CAP,E 0.1-50 SME
C326	87-010-544-049		CAP,E 0.1-50 SME
C327	87-010-427-089		C-CAP,S 0.039-25 F
C328	87-010-427-089		C-CAP,S 0.039-25 F
C329	87-010-546-049		CAP,E 0.33-50
C330	87-010-546-049		CAP,E 0.33-50
C331	87-010-195-089		C-CAP,S 0.068-25 F
C332	87-010-195-089		C-CAP,S 0.068-25 F
C333	87-010-402-049		CAP E2.2-50 SME
C334	87-010-402-049		CAP E2.2-50 SME
C335	87-012-140-089		C-CAP,S 470P-50 CH
C336	87-012-140-089		C-CAP,S 470P-50 CH
C337	87-010-404-049		CAP,E 4.7-50 SME
C338	87-010-404-049		CAP,E 4.7-50 SME
C339	87-010-197-089		C-CAP,S 0.01-25 B
C340	87-010-260-049		CAP,E 47-25 SME
C341	87-010-260-049		CAP,E 47-25 SME
C342	87-010-260-049		CAP,E 47-25 SME
C351	87-010-574-089		C-CAP,S 470P-50 UJ<K,EE,EEZ,EZ>
C352	87-010-574-089		C-CAP,S 470P-50 UJ<K,EE,EEZ,EZ>
C981	87-010-197-089		C-CAP,S 0.01-25 B
CF1	87-008-497-089		CERA LOCK CST7.68MTW
D14	87-017-376-080		LED,SEL6514C TP6
D15	87-017-376-080		LED,SEL6514C TP6
D16	87-017-376-080		LED,SEL6514C TP6
D17	87-017-376-080		LED,SEL6514C TP6
D18	87-017-376-080		LED,SEL6514C TP6
D19	87-017-376-080		LED,SEL6514C TP6
D20	87-017-376-080		LED,SEL6514C TP6
D59	87-017-369-080		LED SEL2510C TP-6
D60	87-017-369-080		LED SEL2510C TP-6
D61	87-020-862-080		LED,SEL-2213C
D62	87-020-862-080		LED,SEL-2213C
D63	87-020-862-080		LED,SEL-2213C
D64	87-020-862-080		LED,SEL-2213C
D65	87-020-862-080		LED,SEL-2213C
D66	87-020-862-080		LED,SEL-2213C
D67	87-020-862-080		LED,SEL-2213C
D68	87-020-862-080		LED,SEL-2213C
D69	87-020-862-080		LED,SEL-2213C
D70	87-020-862-080		LED,SEL-2213C
D71	87-020-862-080		LED,SEL-2213C
D72	87-020-862-080		LED,SEL-2213C
D73	87-020-862-080		LED,SEL-2213C
FB981	87-003-216-019		F-BEAD,BLO1RN1
FB982	87-003-216-019		F-BEAD,BLO1RN1
FL1	85-NT1-606-019		FL,BJ357GK
J1	81-MX4-630-019		JACK,3.5

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
L1	87-003-102-089		COIL,10UH
L2	87-003-152-089		COIL,100UH
L21	87-003-102-089		COIL,10UH
L22	87-003-102-089		COIL,10UH
L30	87-003-102-089		COIL,10UH
L32	87-003-102-089		COIL,10UH
R15	87-022-610-080		C-RES,S11K-1/10W F
R16	87-022-610-080		C-RES,S11K-1/10W F
R17	87-022-610-080		C-RES,S11K-1/10W F
R18	87-022-610-080		C-RES,S11K-1/10W F
SW1	87-036-215-089		SW,TACT EVQ21404M
SW2	87-036-215-089		SW,TACT EVQ21404M
SW3	87-036-215-089		SW,TACT EVQ21404M
SW4	87-036-215-089		SW,TACT EVQ21404M
SW5	87-036-215-089		SW,TACT EVQ21404M
SW6	87-036-215-089		SW,TACT EVQ21404M
SW7	87-036-215-089		SW,TACT EVQ21404M
SW8	87-036-215-089		SW,TACT EVQ21404M
SW9	87-036-215-089		SW,TACT EVQ21404M
SW10	87-036-215-089		SW,TACT EVQ21404M
SW11	87-036-215-089		SW,TACT EVQ21404M
SW12	87-036-215-089		SW,TACT EVQ21404M
SW13	87-036-215-089		SW,TACT EVQ21404M
SW14	87-036-215-089		SW,TACT EVQ21404M
SW15	87-036-215-089		SW,TACT EVQ21404M
SW16	87-036-215-089		SW,TACT EVQ21404M
VR1	81-MT3-633-019		VR 10KA RK11K1130
VR101	82-NT1-651-019		VOL SLIDE 10KB<HE,HK,HR>
VR201	83-NTB-631-019		VOL,SLIDE 100KMN
VOL C.B			
C201	87-010-405-089		CAP,E 10-50 SME
C202	87-010-405-089		CAP,E 10-50 SME
C209	87-010-177-089		C-CAP,S 820P-50 SL
C210	87-010-177-089		C-CAP,S 820P-50 SL
C211	87-010-197-089		C-CAP,S 0.01-25 B
C212	87-010-197-089		C-CAP,S 0.01-25 B
C215	87-010-404-089		CAP,E 4.7-50 SME
C216	87-010-404-089		CAP,E 4.7-50 SME
C217	87-012-155-089		C-CAP,S 180P-50 CH
C218	87-012-155-089		C-CAP,S 180P-50 CH
C219	87-010-184-089		C-CAP,S 3300P-50 B
C220	87-010-184-089		C-CAP,S 3300P-50 B
C221	87-010-404-089		CAP,E 4.7-50 SME
C222	87-010-404-089		CAP,E 4.7-50 SME
C225	87-010-400-089		CAP,E 0.47-50 SME
C226	87-010-400-089		CAP,E 0.47-50 SME
C227	87-010-404-089		CAP,E 4.7-50 SME
C228	87-010-404-089		CAP,E 4.7-50 SME
C229	87-010-405-089		CAP,E 10-50 SME
C230	87-010-405-089		CAP,E 10-50 SME
C231	87-010-405-089		CAP,E 10-50 SME
C232	87-010-401-089		CAP,E 1-50 SME
C233	87-010-405-089		CAP,E 10-50 SME
C234	87-010-401-089		CAP,E 1-50 SME
C235	87-010-178-089		C-CAP,S 1000P-50 B
C236	87-010-178-089		C-CAP,S 1000P-50 B
C237	87-010-101-089		CAP,E 220-16 SME
C238	87-010-197-089		C-CAP,S 0.01-25 B
C501	87-010-404-089		CAP,E 4.7-50 SME
C502	87-012-393-089		C-CAP,S 0.22-16,R,K
C503	87-012-393-089		C-CAP,S 0.22-16,R,K
C504	87-012-393-089		C-CAP,S 0.22-16,R,K
C505	87-012-394-089		C-CAP,0.68-16,R,K
C509	87-010-248-089		CAP,E 220-10 SME
C512	87-010-405-089		CAP,E 10-50 SME
C513	87-010-405-089		CAP,E 10-50 SME
C516	87-010-263-089		CAP,E 100-10 SME 5X11
C517	87-010-405-089		CAP,E 10-50 SME

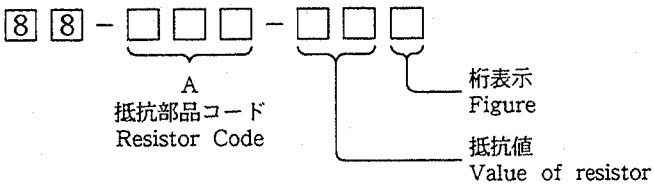
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C518	87-010-405-089		CAP,E 10-50 SME
C519	87-010-405-089		CAP,E 10-50 SME
C520	87-016-472-089		CAP,E 22-16,SME (K)
C522	87-010-404-089		CAP,E 4.7-50 SME
C523	87-016-081-089		C-CAP,S 0.1-16 RK
C524	87-012-393-089		C-CAP,S 0.22-16,R,K
C525	87-016-081-089		C-CAP,S 0.1-16 RK
C526	87-016-081-089		C-CAP,S 0.1-16 RK
C527	87-016-081-089		C-CAP,S 0.1-16 RK
C530	87-010-176-089		C-CAP,S 680P-50 SL
C540	87-010-176-089		C-CAP,S 680P-50 SL
C541	87-016-456-089		CAP,E 22-16 LLA
C542	87-010-263-089		CAP,E 100-10 SME 5X11
C603	87-010-196-089		C-CAP,S 0.1-25 F
C604	87-010-196-089		C-CAP,S 0.1-25 F
C607	87-010-405-089		CAP,E 10-50 SME
C608	87-010-405-089		CAP,E 10-50 SME
C611	87-010-322-089		C-CAP,S 100P-50 CH
C612	87-010-322-089		C-CAP,S 100P-50 CH
C613	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C614	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C615	87-010-404-089		CAP,E 4.7-50 SME
C616	87-010-404-089		CAP,E 4.7-50 SME
C617	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C618	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C619	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C620	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C621	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C622	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C623	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C624	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C627	87-010-404-089		CAP,E 4.7-50 SME
C628	87-010-404-089		CAP,E 4.7-50 SME
C629	87-010-322-089		C-CAP,S 100P-50 CH
C630	87-010-322-089		C-CAP,S 100P-50 CH
C633	87-010-405-089		CAP,E 10-50 SME
C634	87-010-405-089		CAP,E 10-50 SME
C637	87-010-322-089		C-CAP,S 100P-50 CH
C638	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C639	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C640	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C643	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C644	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C645	87-010-405-089		CAP,E 10-50 SME
C646	87-010-405-089		CAP,E 10-50 SME
C647	87-010-196-089		C-CAP,S 0.1-25 F
C648	87-010-196-089		C-CAP,S 0.1-25 F
C651	87-010-405-089		CAP,E 10-50 SME
C652	87-010-405-089		CAP,E 10-50 SME
C653	87-010-196-089		C-CAP,S 0.1-25 F
C654	87-010-196-089		C-CAP,S 0.1-25 F
C655	87-010-805-089		C-CAP,S 1-16 F
C656	87-010-805-089		C-CAP,S 1-16 F
C801	87-010-405-089		CAP,E 10-50 SME
C805	87-010-187-089		C-CAP,S 5600P-50 B<HE,HK,HR>
C806	87-010-401-089		CAP,E 1-50 SME
C807	87-010-401-089		CAP,E 1-50 SME
C808	87-010-401-089		CAP,E 1-50 SME
C809	87-010-263-089		CAP,E 100-10 SME 5X11
C810	87-010-263-089		CAP,E 100-10 SME 5X11
C811	87-010-263-089		CAP,E 100-10 SME 5X11
C814	87-010-197-089		C-CAP,S 0.01-25 B
C815	87-018-134-089		CAP,TC-U 0.01-16 Y
C816	87-010-196-089		C-CAP,S 0.1-25 F
C817	87-010-196-089		C-CAP,S 0.1-25 F
C818	87-010-196-089		C-CAP,S 0.1-25 F
C819	87-010-188-089		C-CAP,S 6800P-50 B
C820	87-010-180-089		C-CAP,S 1500P-50 B
C821	87-012-393-089		C-CAP,S 0.22-16,R,K
C822	87-010-188-089		C-CAP,S 6800P-50 B
C823	87-010-195-089		C-CAP,S 0.068-25 F
C824	87-010-195-089		C-CAP,S 0.068-25 F
C825	87-010-180-089		C-CAP,S 1500P-50 B
C829	87-010-401-089		CAP,E 1-50 SME
C830	87-010-374-089		CAP,E 47-10
C831	87-010-179-089		C-CAP,S 1200P-50 B<HE,LH,HK,HR>
C837	87-010-196-089		C-CAP,S 0.1-25 F<HE,LH,HK,HR>
C838	87-010-196-089		C-CAP,S 0.1-25 F
C841	87-012-154-089		C-CAP,S 150P-50 CH
C842	87-012-154-089		C-CAP,S 150P-50 CH
C843	87-010-314-089		C-CAP,S 22P-50 CH
C844	87-010-322-089		C-CAP,S 100P-50 CH<K,EE,EEZ,EZ>
C846	87-010-197-089		C-CAP,S 0.01-25 B
C847	87-010-177-089		C-CAP,S 820P-50 SL
C853	87-010-401-089		CAP,E 1-50 SME
C855	87-010-196-089		C-CAP,S 0.1-25 F
C856	87-010-196-089		C-CAP,S 0.1-25 F
L801	87-003-147-089		COIL,22UH
R506	87-025-407-089		RES,M/F 100K-1/8W
VR601	85-NT1-607-019		VR,MOT 50KBX4
WIR201	82-NT2-641-019		F-CABLE,11-2.0
WIR202	82-NT2-640-019		F-CABLE,3-2.0
TRAY C.B			
SW801	87-036-215-089		SW,TACT EVQ21404M
SW802	87-036-215-089		SW,TACT EVQ21404M
SW803	87-036-215-089		SW,TACT EVQ21404M
SW804	87-036-215-089		SW,TACT EVQ21404M
SW805	87-036-215-089		SW,TACT EVQ21404M
SW806	87-036-215-089		SW,TACT EVQ21404M
SW807	87-036-215-089		SW,TACT EVQ21404M
SW808	87-036-215-089		SW,TACT EVQ21404M
SW809	87-036-215-089		SW,TACT EVQ21404M
SW810	87-036-215-089		SW,TACT EVQ21404M
SW811	87-036-215-089		SW,TACT EVQ21404M
SW812	87-036-215-089		SW,TACT EVQ21404M
SW813	87-036-215-089		SW,TACT EVQ21404M<HE,HK,HR>
SW814	87-036-215-089		SW,TACT EVQ21404M
SW815	87-036-215-089		SW,TACT EVQ21404M
SW816	87-036-215-089		SW,TACT EVQ21404M
SW817	87-036-215-089		SW,TACT EVQ21404M
SW818	87-036-215-089		SW,TACT EVQ21404M
SW819	87-036-215-089		SW,TACT EVQ21404M
SW820	87-036-215-089		SW,TACT EVQ21404M<HR,U>
SW821	87-036-215-089		SW,TACT EVQ21404M
SW822	87-036-215-089		SW,TACT EVQ21404M
SW824	87-036-215-089		SW,TACT EVQ21404M
SW825	87-036-215-089		SW,TACT EVQ21404M
SW826	87-036-215-089		SW,TACT EVQ21404M
SW827	87-036-215-089		SW,TACT EVQ21404M
SW828	87-036-110-019		SW,PUSH SPPB 62
SW829	87-036-110-019		SW,PUSH SPPB 62
AMP C.B			
C901	87-010-178-089		C-CAP,S 1000P-50 B
C902	87-010-178-089		C-CAP,S 1000P-50 B
C903	87-010-405-089		CAP,E 10-50 SME
C904	87-010-405-089		CAP,E 10-50 SME
C907	87-010-178-089		C-CAP,S 1000P-50 B
C908	87-010-178-089		C-CAP,S 1000P-50 B
C909	87-010-374-089		CAP,E 47-10
C910	87-010-374-089		CAP,E 47-10
C911	87-010-315-089		C-CAP,S 27P-50 CH
C912	87-010-315-089		C-CAP,S 27P-50 CH
C913	87-010-260-089		CAP,E 47-25 SME
C914	87-010-260-089		CAP,E 47-25 SME
C915	87-010-408-089		CAP,E 47-50 SME
C916	87-010-196-089		C-CAP,S 0.1-25 F

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C917	87-010-196-089		C-CAP,S 0.1-25 F
C918	87-010-194-089		C-CAP,S 0.047-25 F
C919	87-010-194-089		C-CAP,S 0.047-25 F
C928	87-010-178-089		C-CAP,S 1000P-50 B
C961	87-010-178-089		C-CAP,S 1000P-50 B<K,EE,EEZ,EZ>
C962	87-010-178-089		C-CAP,S 1000P-50 B<K,EE,EEZ,EZ>
R923	87-022-200-089		RES METAL 0.56-1W
R924	87-022-200-089		RES METAL 0.56-1W
MOTOR C.B			
C401	87-010-263-089		CAP,E 100-10 SME 5X11
C402	87-010-263-089		CAP,E 100-10 SME 5X11
PT-1 C.B			
⚠	87-033-213-089		CLAMP,FUSE SMK
⚠	82-304-743-019		TERMINAL, 1P
⚠F1	87-035-365-019		FUSE,2A 250V TE<K,EE,EEZ,EZ>
⚠F1	87-035-190-019		FUSE,T2A<HR>
⚠F2	87-035-365-019		FUSE,2A 250V TE<HE,LH,HK>
⚠PT101	85-NT1-612-019		PT,5NT-1 HR<HE,LH,HK,HR>
⚠PT101	85-NT1-608-019		PT,5NT-1 K<K,EE,EEZ,EZ>
⚠PT101	85-NT1-610-019		PT,5NT-1 K<U>

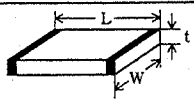
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
PT-2 C.B			
R995	87-022-050-089		RESIS METAL 1W-0.22J
R996	87-022-050-089		RESIS METAL 1W-0.22J
R998	87-022-620-089		RES,M/F 0.22-2WJ NO P
SW C.B<HE,LH,HK,HR>			
⚠F901	87-035-365-019		FUSE,2A 250V T E<HE,LH,HK>
⚠SW901	87-036-173-019		SW,SL 2-2-4 SDKG<HE,LH,HK,HR>

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

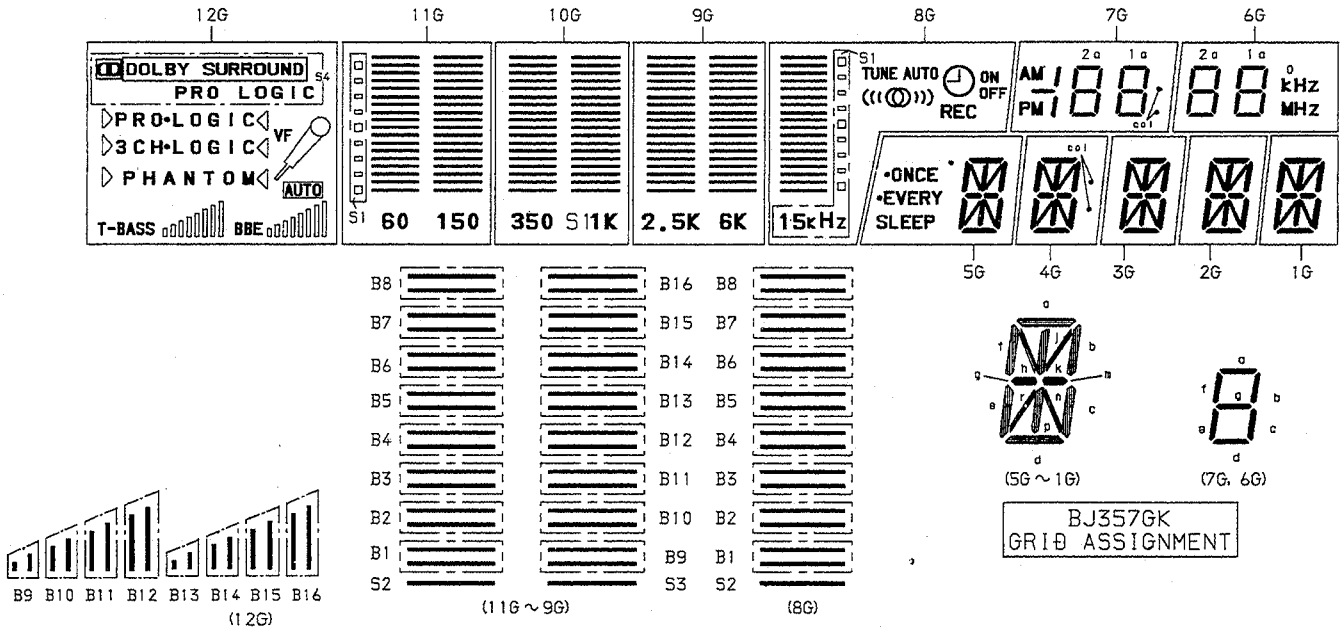
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions／寸法 (mm) Form/外形	L	W	t	Resistor Code : A 抵抗コード : A
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3126	±5%	CJ		3.2	1.6	0.5 ~0.7	128

FL GRID ASSIGNMENT

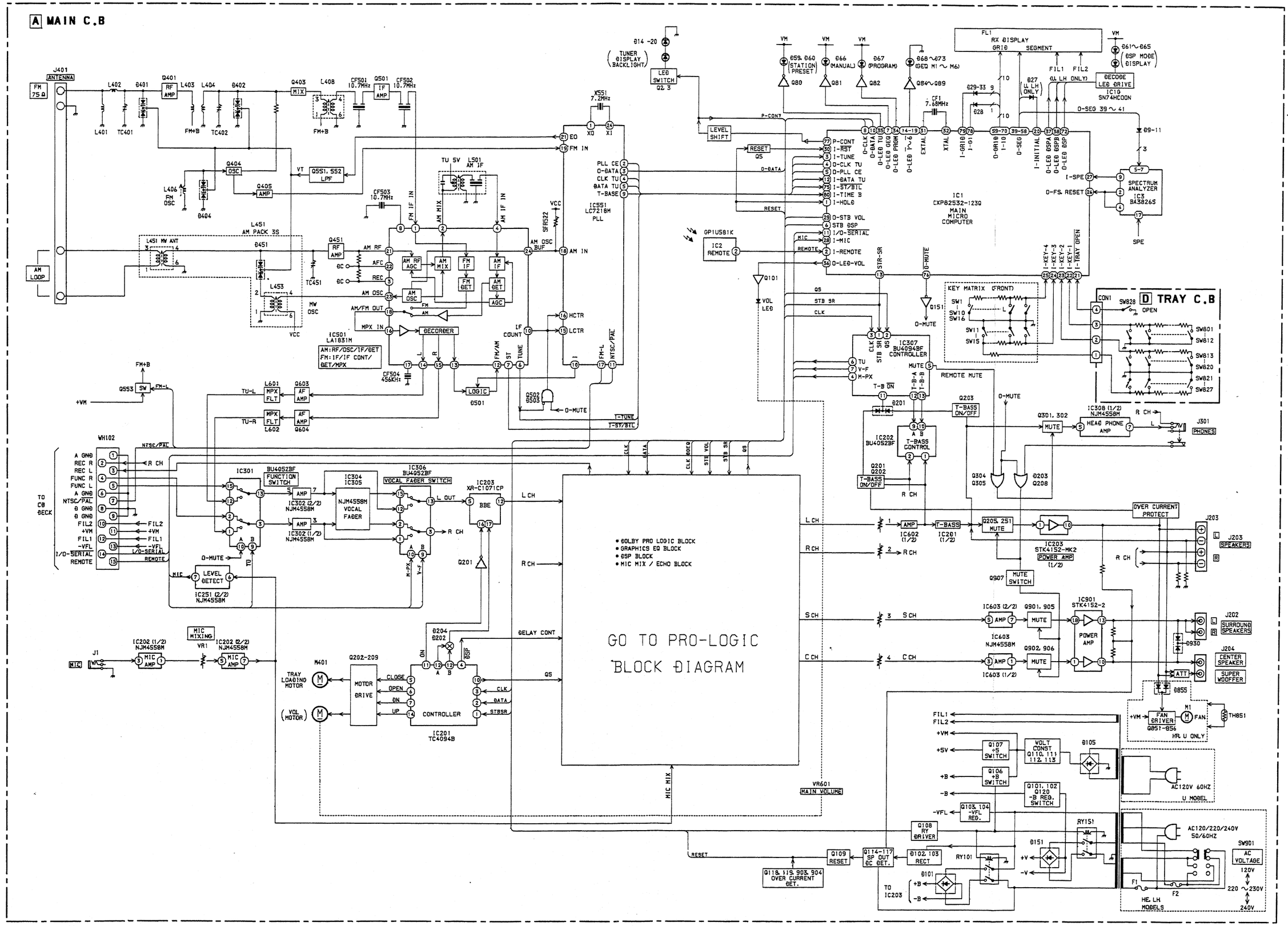


ANODE CONNECTION

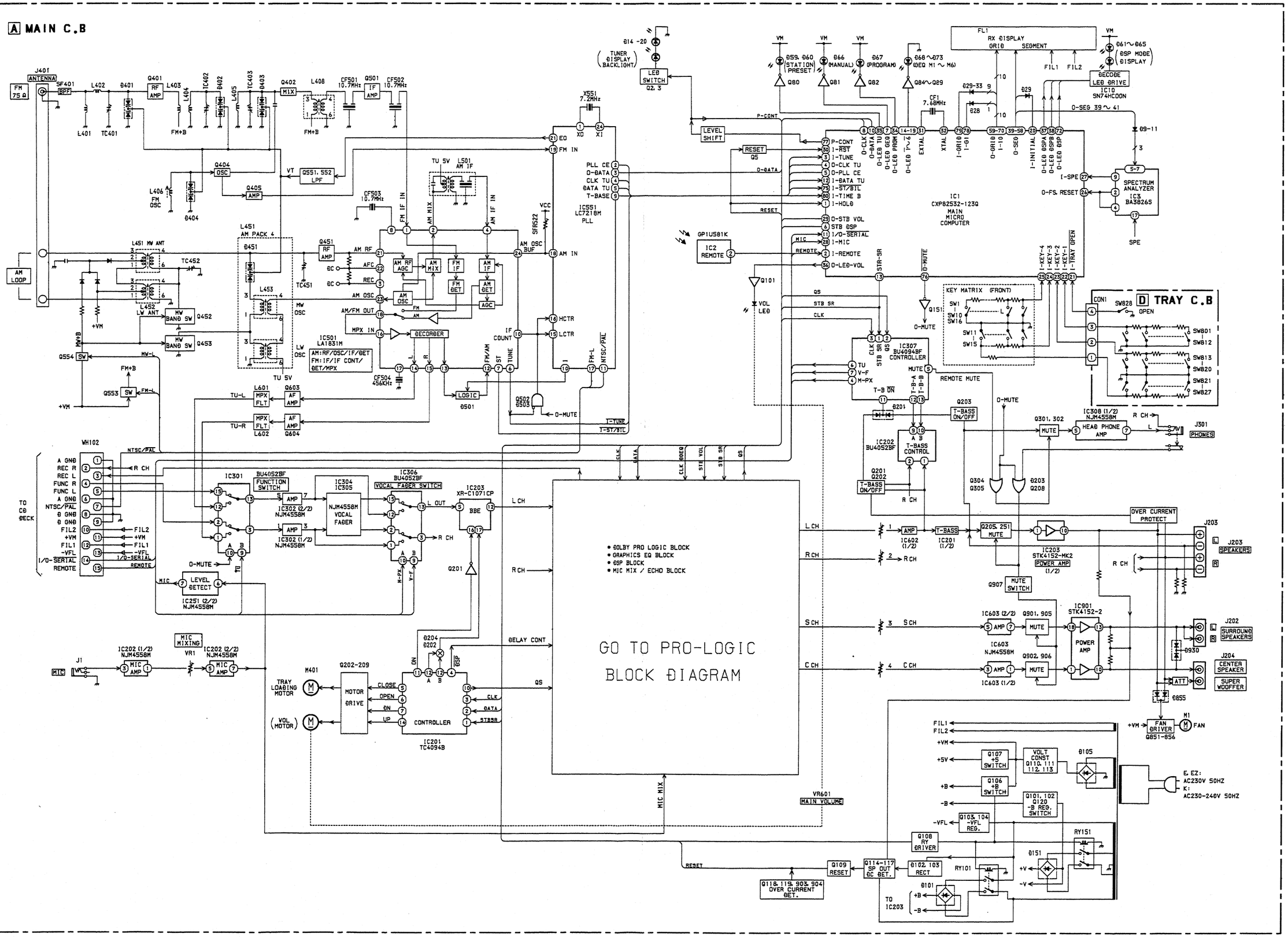
	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	–	B1	B1	B1	B1	2f	2f	n	n	n	n	n
P2	AUTO	B2	B2	B2	B2	2c	2c	r	r	r	r	r
P3	VF	B3	B3	B3	B3	col (DOWN)	MHz	c	c	c	c	c
P4	BBE	B4	B4	B4	B4	2d	2d	m	m	m	m	m
P5	T-BASS	B5	B5	B5	B5	1b	1b	b	b	b	b	b
P6	PHANTOM	B6	B6	B6	B6	1c	1c	j	j	j	j	j
P7	PHANTOM	B7	B7	B7	B7	1d	1d	a	a	a	a	a
P8	SCH-LOGIC	B8	B8	B8	B8	PM	o	o (ONCE)	–	–	–	–
P9	B9	B9	B9	B9	B9	–	2a	2a	d	d	d	d	d
P10	B10	B10	B10	B10	B10	–	2g	2g	p	p	p	p	p
P11	B11	B11	B11	B11	B11	–	col (UP)	KHz	e	e	e	e	e
P12	B12	B12	B12	B12	B12	OFF	2e	2e	g	g	g	g	g
P13	B13	B13	B13	B13	B13	AUTO	1f	1f	f	f	f	f	f
P14	B14	B14	B14	B14	B14	TUNE	1g	1g	k	k	k	k	k
P15	B15	B15	B15	B15	B15	((( )))	1e	1e	h	h	h	h	h
P16	B16	B16	B16	B16	B16	ON	/	–	SLEEP	–	–	–	–
P17	S4	S1	S1	S1	S1	AM	–	o (EVERY)	–	–	–	–
P18	PROLOGIC	S2	S2	S2	S2	⟺	–	EVERY	–	–	–	–
P19	PRO-LOGIC	S3	S3	S3	REC	1a	1a	o	col (UP)	–	–	–
P20	3CHLOGIC	–	–	–	🕒	2b	2b	ONCE	col (DOWN)	–	–	–

BJ357GK
ANODE CONNECTION

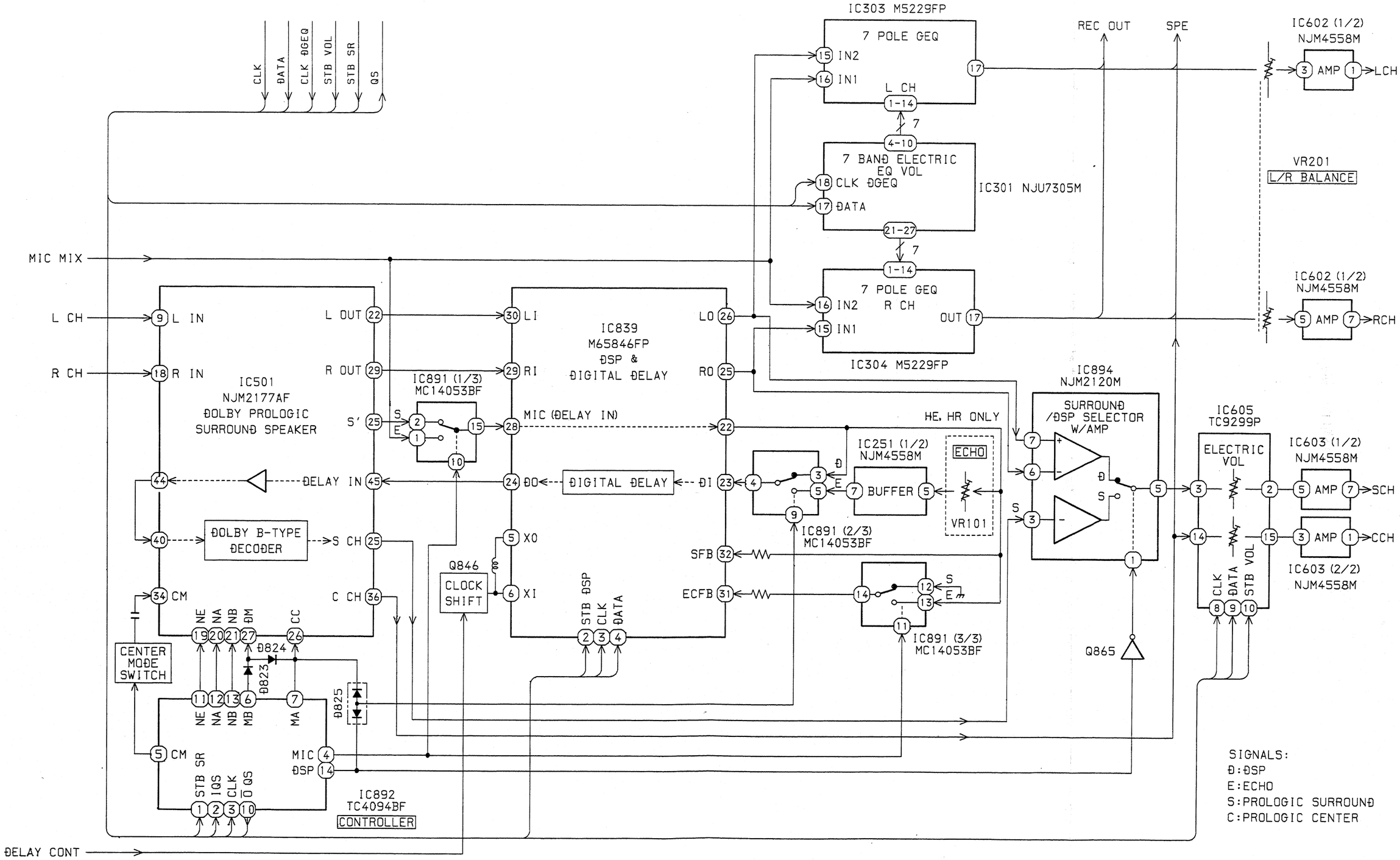
BLOCK DIAGRAM-1 (MAIN : HE,LH,HK,HR,U)



BLOCK DIAGRAM-2 (MAIN : EE,EZ,EEZ,K)



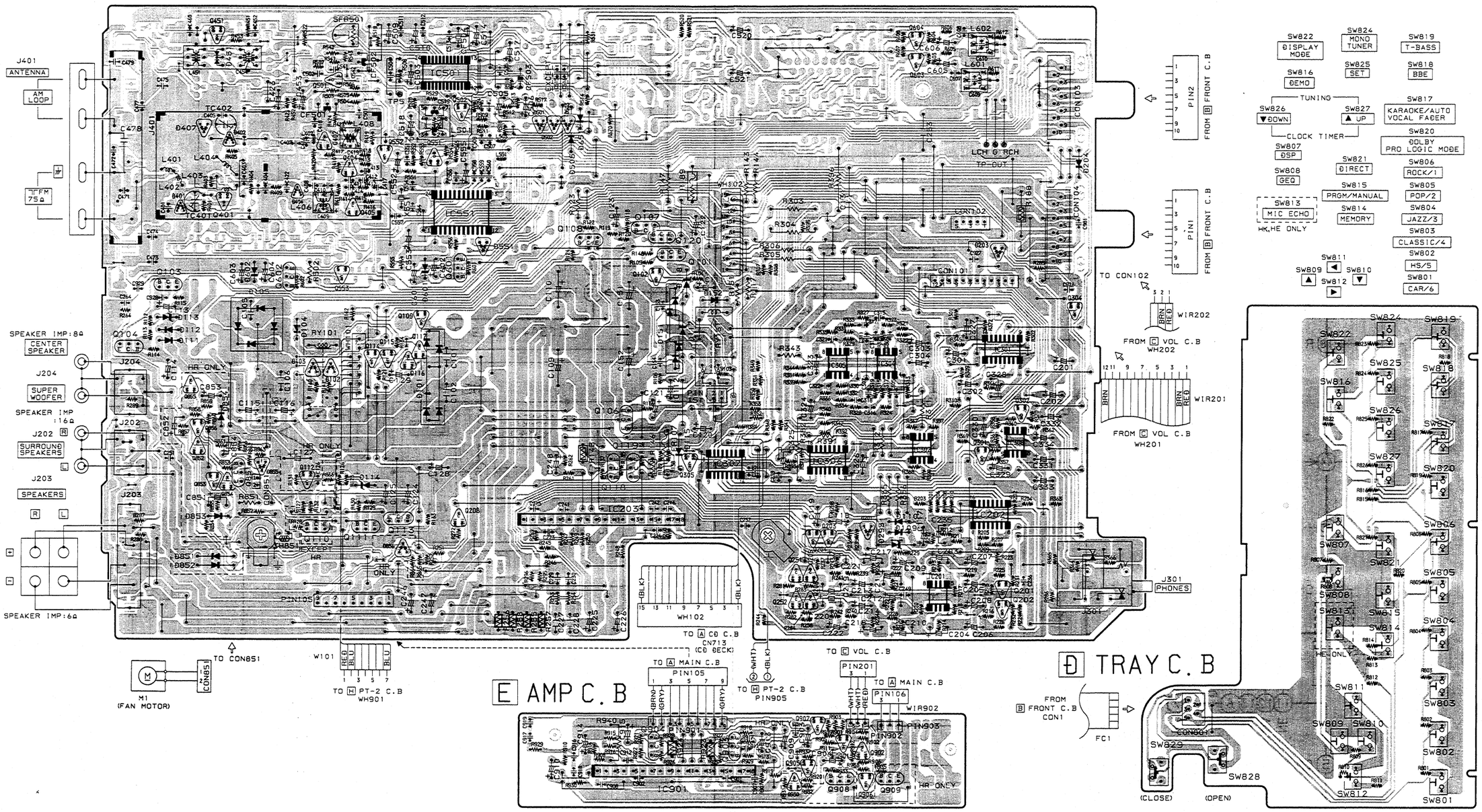
BLOCK DIAGRAM-3 (DOLBY PROLOGIC)



1 2 3 4 5 6 7 8 9 10 11 12 13 14

A B C D E F G H I J

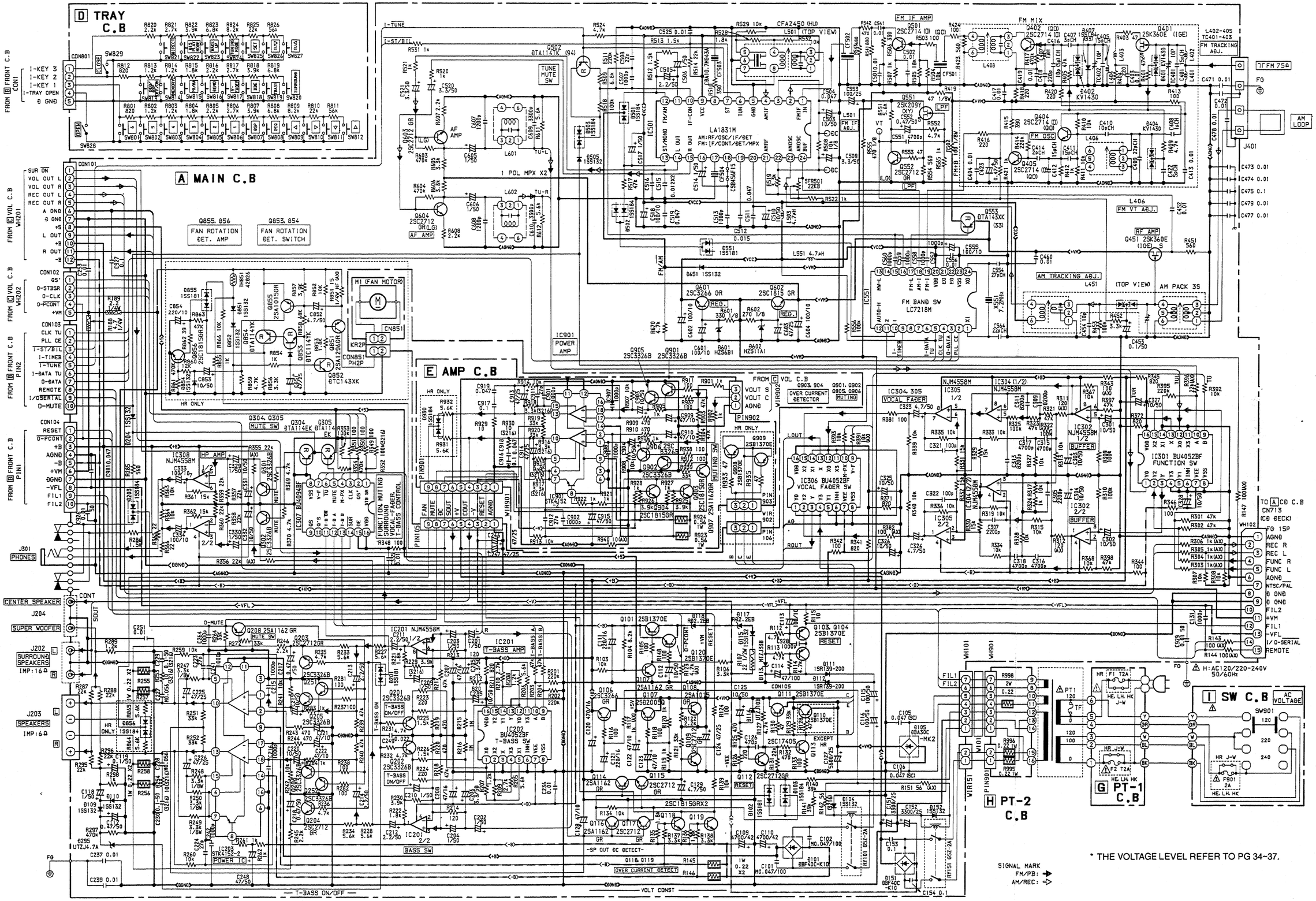
A MAIN C.B



E AMP C.B

D TRAY C.B

SCHEMATIC DIAGRAM-1 (MAIN : HE,HK,LH,HR)



* THE VOLTAGE LEVEL REFER TO PG 34-37.

1 2 3 4 5 6 7 8 9 10 11 12 13 14

A B C D E F G H I J

A MAIN C.B

J401 ANTENNA
MW/LW LOOP
75Ω UNBAL

SPEAKER IMP:8Ω
CENTER SPEAKER J204
SUPER WOOFER J202
SPEAKER IMP :16Ω
SURROUND SPEAKERS J203
SPEAKERS
SPEAKER IMP:6Ω

TO CON851
M1 (FAN MOTOR)
W101 RED BLU
TO H PT-2 C.B WH901

TO A MAIN C.B PIN105
TO A CD C.B CN713 (CD DECK)
WH102 (BLK)
TO H PT-2 C.B PIN905
TO C VOL C.B PIN201
TO A MAIN C.B PIN106
WIR902

E AMP C.B

B FRONT C.B

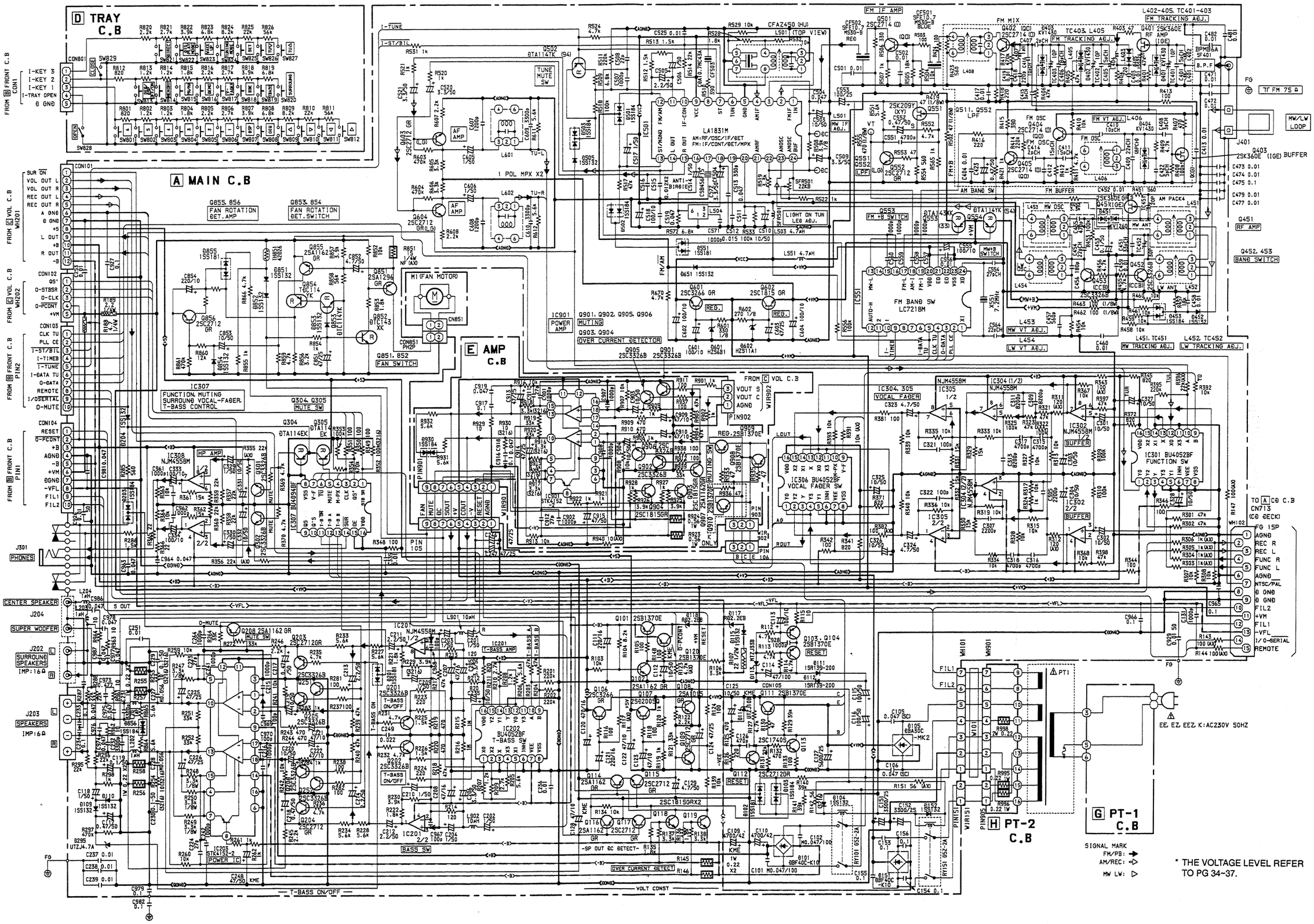
PIN2 FROM B FRONT C.B
PIN1 FROM B FRONT C.B
TO CON102
WIR202 FROM C VOL C.B WH202
TO CON101
WIR201 FROM C VOL C.B WH201
J301 PHONES

SW822 DISPLAY MODE
SW824 MONO TUNER
SW819 T-BASS
SW816 DEMO
SW825 SET
SW818 BBE
TUNING
SW826 ▼DOWN
SW827 ▲UP
SW817 KARAOKE/AUTO VOCAL FADER
CLOCK TIMER
SW820 DOLBY PRO LOGIC MODE
SW807 DSP
SW821 DIRECT
SW806 ROCK/1
SW808 GEQ
SW815 PRGM/MANUAL
SW805 POP/2
SW814 MEMORY
SW804 JAZZ/3
SW803 CLASSIC/4
SW811
SW809 SW810
SW812
SW802 HS/5
SW801 CAR/6

D TRAY C.B

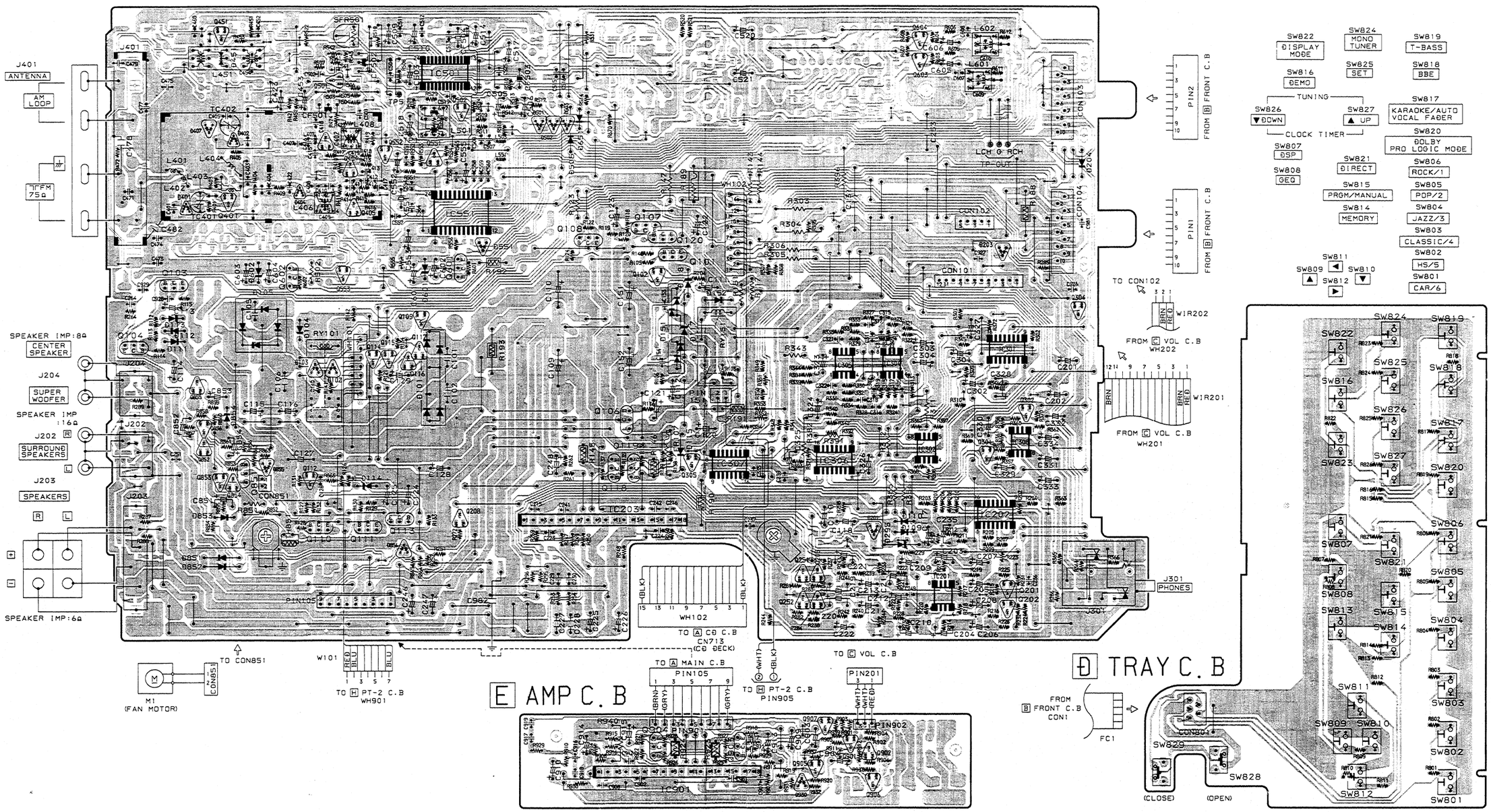
FROM B FRONT C.B CON1
FC1
CON801
SW829
SW828
(CLOSE) (OPEN)

SCHEMATIC DIAGRAM-2 (MAIN : EE,EZ,EEZ,K)

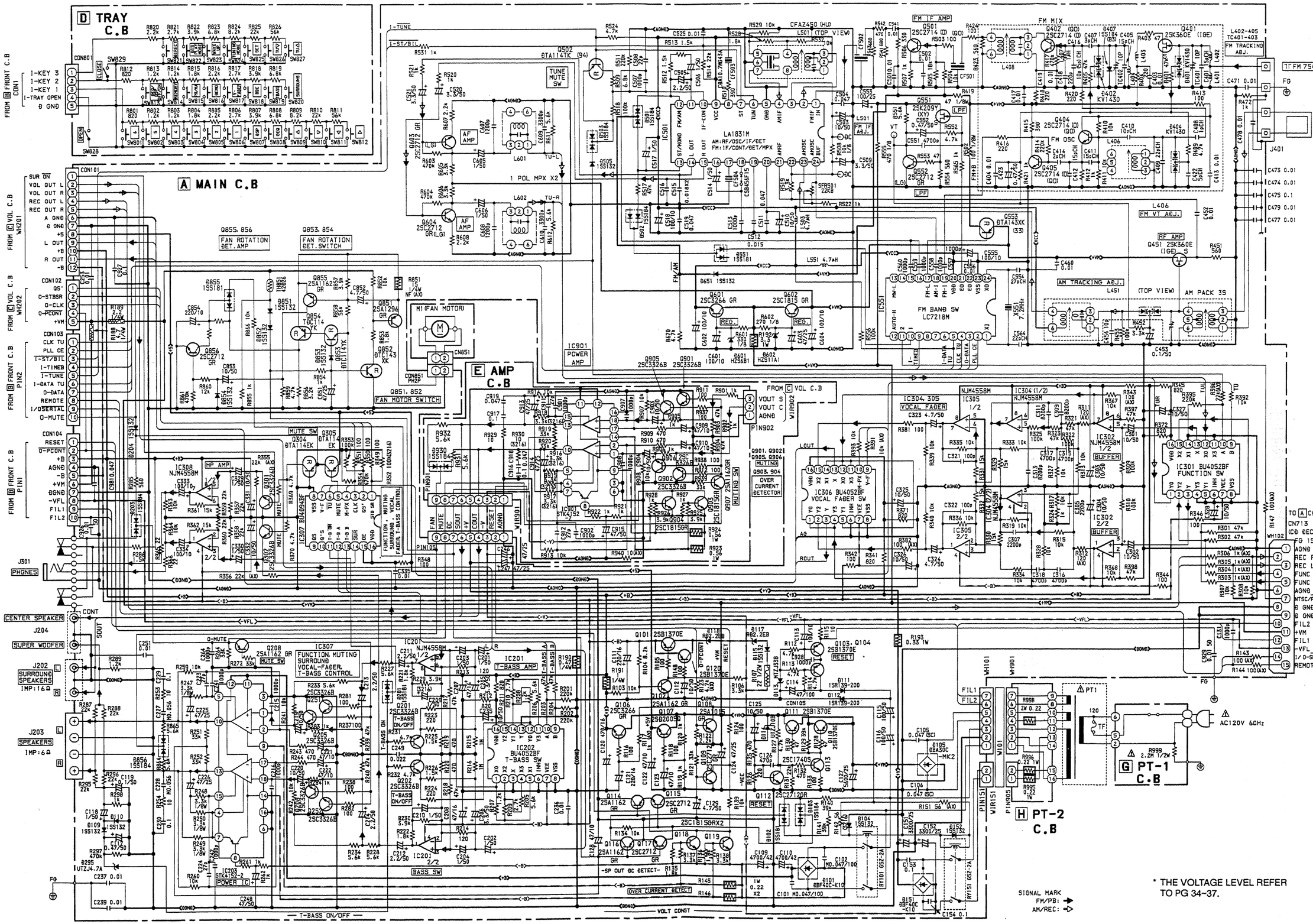


1 2 3 4 5 6 7 8 9 10 11 12 13 14

A B C D E F G H I J



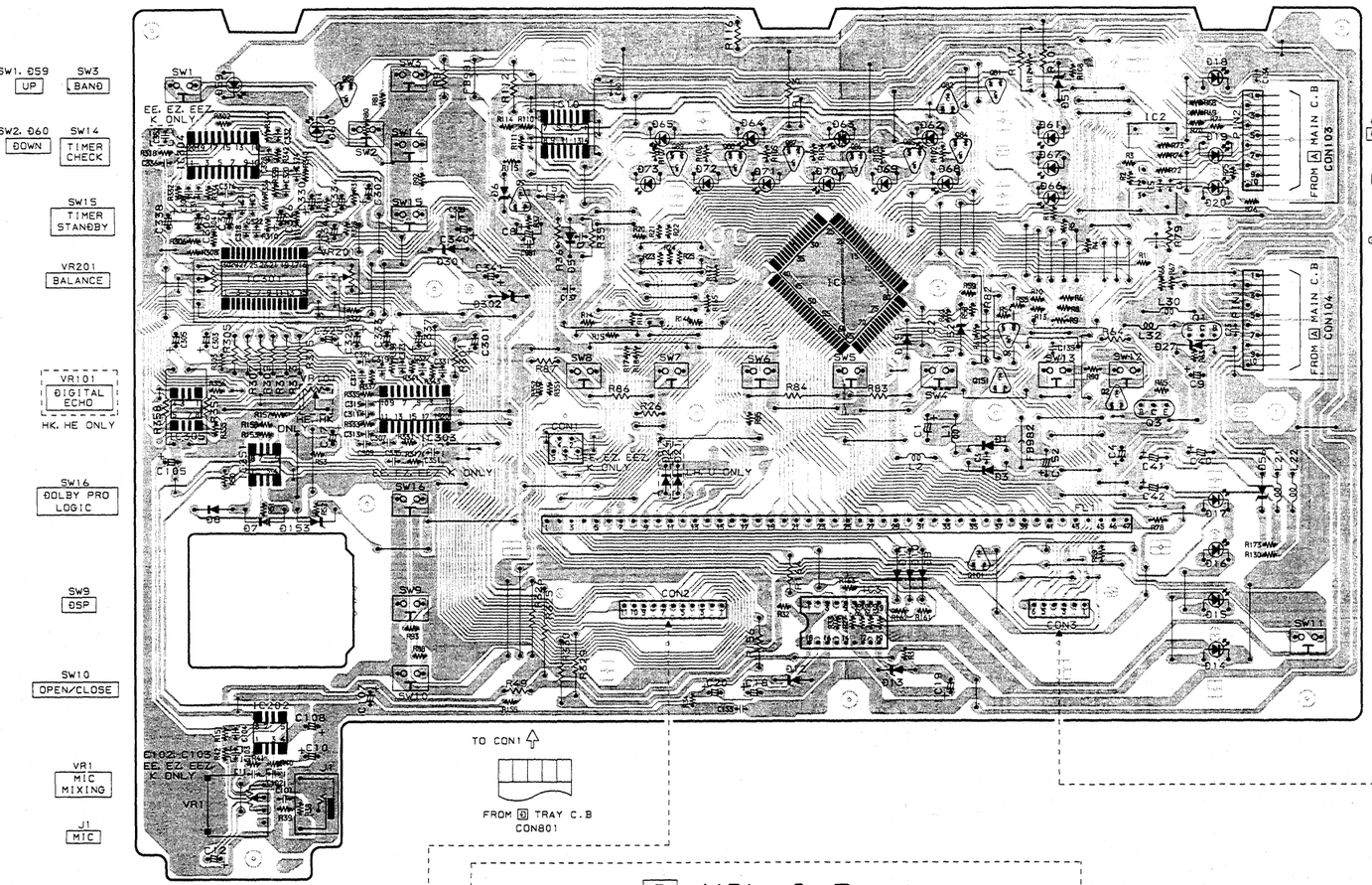
SCHEMATIC DIAGRAM-3 (MAIN : U)



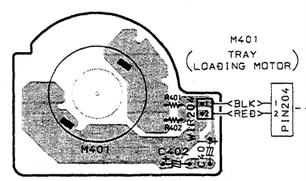
1 2 3 4 5 6 7 8 9 10 11 12 13 14

A B C D E F G H I J

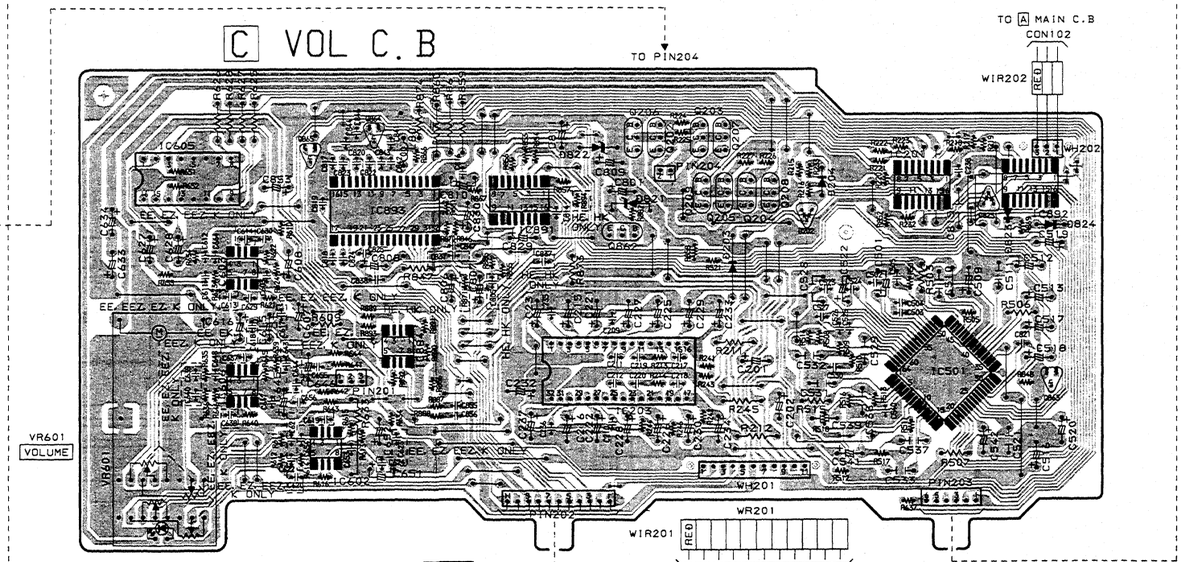
B FRONT C.B



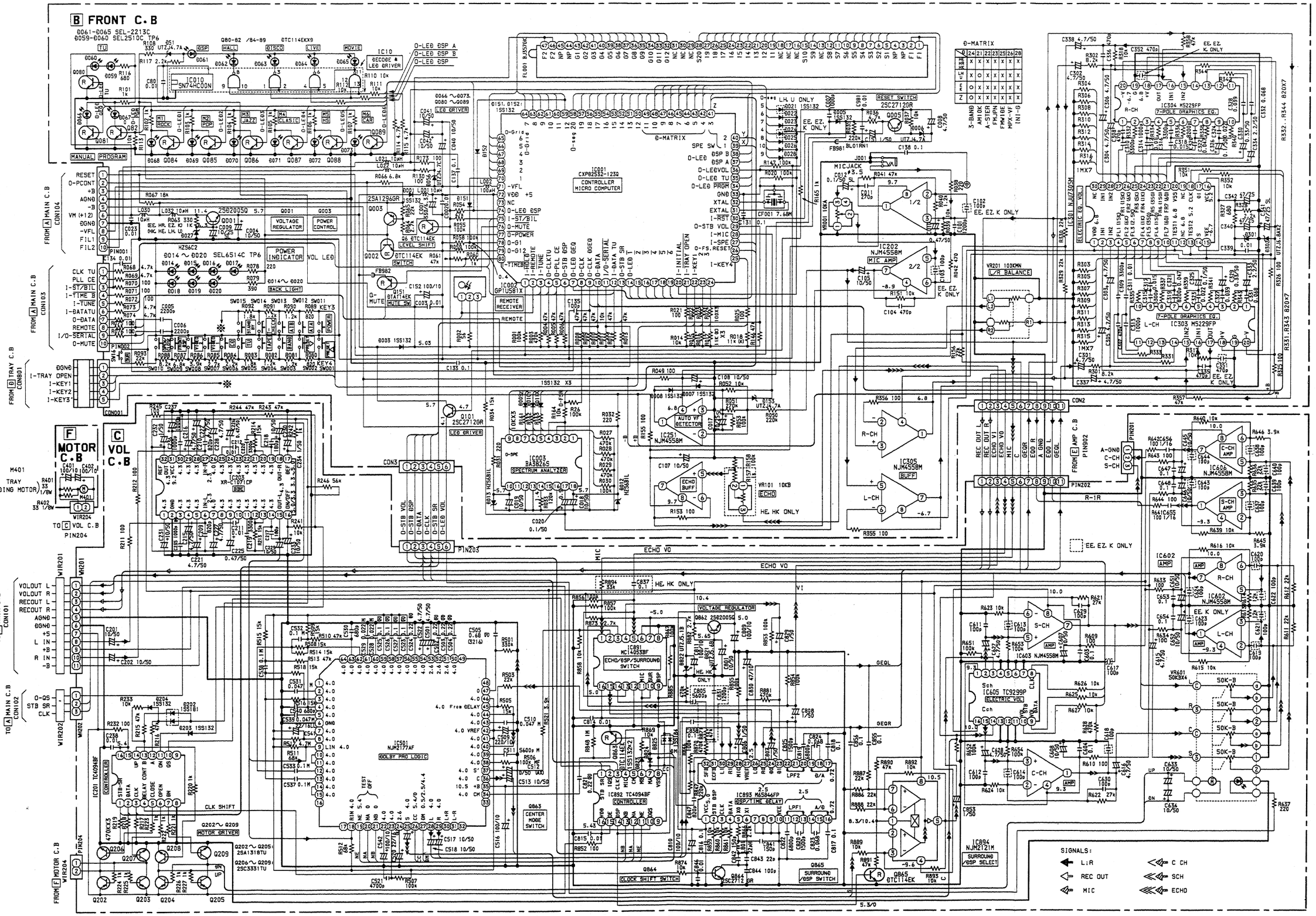
F MOTOR C.B

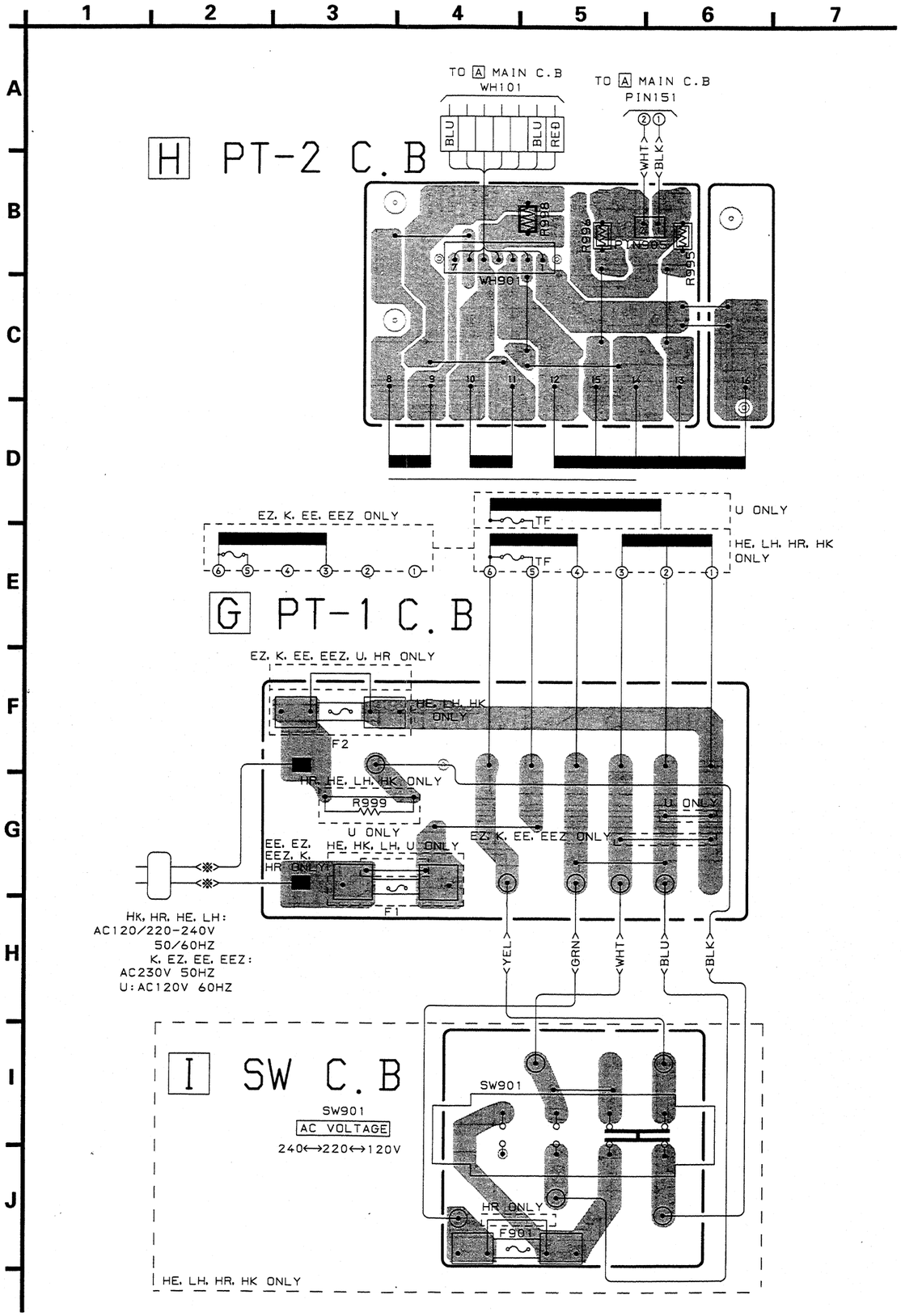


C VOL C.B



SCHEMATIC DIAGRAM-4 (FRONT)





VOLTAGE LEVEL AT MAIN C.B

A MAIN C.B (ALL SERIES)

WH101

Pin No.	Voltage	
1	AC 27.2V	L/R Power Amp.
2	AC 27.2V	
3	AC 27.2V	
4	AC 15.8V	VM
5	AC 15.8V	
6	AC 5.0V	FL Filament
7	AC 5.0V	

WH102

Pin No.	Voltage
1~6	0V
7	(NTSC) 0V (PAL) 5.3V
8,9	0V
10,12	AC 5.0V
11	12.0V
13	-30.8V
14	Digital line
15	0V/5.0V

WIR151

Pin No.	Voltage
1	AC 19.5V
2	AC 19.5V

Diode \ Pole	Anode	Cathode
D101	36.3V	-36.3V
D105	13.8V	0V
D151	25.5V	-25.5V

Pin No.	IC202 Voltage	IC301 Voltage	IC306 Voltage	IC307 Voltage
1	0V	0V	0V	Digital line
2	0V	0V	0V	Digital line
3	0V	0V	0V	Digital line
4	0V	0V	0V	0V/5.4V (VF-MPX off / on)
5	0V	0V	0V	(Mute off) 0V (Mute on) 5.4V
6	0V	0V	0V	(Tuner) 0V (Others) 5.4V
7	-9.7V	-9.7V	-9.7V	(VF off) 0V (VF on) 5.4V
8	0V	0V	0V	0V
9	0V/4.7V (T-Bass on / off)	(Tuner) 0V (Others) 5.4V	(VF off) 0V (VF on) 5.4	NC
10	0V/4.7V (T-Bass on / off)	(Mute off) 0V (Mute on) 5.1V	0V/5.4V (VF-MPX off / on)	NC
11	0V	0V	0V	0V/5.4V (T-Bass on / off)
12	0V	0V	0V	0V/5.4V (T-Bass on/off)
13	0V	0V	0V	0V/5.4V (T-Bass on/off)
14	0V	0V	0V	NC
15	0V	0V	0V	5.5V
16	5.2V	5.2V	5.1V	5.5V

Transistor \ Terminal	Base (B)	Collector (C)	Emitter (E)
Q103	-31.7V	-42.8V	-31.1V
Q104	-43.2V	-54.8V	-42.7V
Q110,Q111	17.7V	12.0V	18.2V
Q908,Q909	17.7V	12.0V	18.2V
Q113	1.65V	17.0V	1.05V
Q101,Q120	-9.3V	-16.9V	-10.3V
Q102	-0.6V	-10.3V	0V
Q112	0.6V	1.7V	0V
Q107	6.0V	12.0V	5.5V
Q106	11.0V	12.0V	10.7V
Q118, Q119	-36.0V	4.7V	-36.0V
Q108 (power on)	11.3V	11.7V	12.0V
(power off)	12V	0V	12.0V
Q109	0V	4.7V	0V
Q114	-0.6V	0V	0V
Q115	0.6V	0V	0V
Q116	0V	-0.6V	0V
Q116	0V	-0.6V	0V
Q117	0V	0.6V	0V
Q201~Q204			
(T-Bass on)	0V	0V	0V
(T-Bass off)	0.7V	0V	0V
Q204,205 Q251,252			
(Mute off)	0V	0V	0V
(Mute on)	0.7V	0V	0V
Q208 (Mute off)	0V	0V	0V
(Mute on)	0.43V	0.78V	1.1V
Q901,902,Q905,906			
(Mute off)	0V	0V	0V
(Mute on)	0.7V	0V	0V
Q907 (Mute off)	0V	0V	0V
(Mute on)	0.43V	0.78V	1.1V
Q301,302			
(Mute off)	0V	0V	0V
(Mute on)	0.7V	0V	0V
Q304 (Mute off)	0V	0V	0V
(Mute on)	0.43V	5.2V	5.3V
Q305 (Mute off)	5.5V	0V	5.5V
(Mute on)	0V	5.3V	0V
Q856 (Mute off)	0V	0V	0V
(Mute on)	0.12V	0.02V	1.1V
Q855 (Mute off)	11.3V	11.9V	12.0V
(Mute on)	11.3V	7.2V	12.0V
Q854 (Mute off)	11.9V	0V	12.0V
(Mute on)	0V	11.9V	12.0V
Q853 (Mute off)	0~2.5V	0V	0V
(Mute on)	0~2.5V	11.9V	0V
Q852 (Mute off)	0.15~3.0V	12.0V	0V
(Mute on)	0.15~3.0V	0V	0V
Q851 (Mute off)	12.0V	0V	12.0V
(Mute on)	10.3V	11.0V	11.0V

* Q856 ~ Q851 only for EE,EZ,EEZ,K destination.

Pin No.	IC203 Voltage	IC901 Voltage
1	0V	0V
2	0V	0V
3	0V	0V
4	-34.5V	-24.2V
5	-1.3V	-1.3V
6	0V	0V
7	-34.5V	-24.5V
8	-35.5V	-25.5V
9	-35.5V	-25.5V
10	0V	0V
11	35.5V	25.8V
12	35.5V	25.8V
13	0V	0V
14	-35.5V	-25.5V
15	-1.3V	-1.3V
16	0V	0V
17	0V	0V
18	0V	0V

Pin No.	IC201 Voltage	IC308 Voltage	IC302,304,305 Voltage
1	0V	0V	0V
2	0V	0V	0V
3	0V	0V	0V
4	-9.7V	0V	-8.6V
5	0V	0V	0V
6	0V	0V	0V
7	0V	0V	0V
8	10.4V	10.4V	9.3V

Voltage level at Tuner Block

Transistor \ Terminal		Base (B)	Collector (C)	Emitter (E)
Q601		5.9V	12.0V	5.3V
Q602		10.1V	12.0V	9.4V
Q603,Q604		2.6V	5.0V	2.0V
Q401		0V	0V	3.7V
Q402		0.7V	7.5V	0V
Q404		2.2V	7.0V	1.5V
Q405		0.7V	6.7V	0V
Q451		0V	0.6V	9.2V
Q501		4.7V	6.4V	4.0V
Q502	(FM-ST)	0V	0V	0V
	(Normal)	5.3V	0V	0V
	(Scan/Mute)	5.3V	1.5V	4.8V
Q551		0.49~0.53V	0.6~0.63V	10.8~11.3V
Q552		0.6V	1.1~9.4V	0V
Q403		0V	0V	3.4V
Q452	(MW)	0.75V	0V	0V
	(others)	0V	0V	0V
Q453	(MW)	0.75V	0V	0V
	(others)	0V	0V	0V
Q554	(MW)	0.1V	9.4V	9.4V
	(others)	9.3V	0V	9.4V

* Q403, Q452, Q453, Q554 are used for EE,EZ,K,EEZ destination.

Pin No.	CON103 Voltage	CON104 Voltage
1	Digital line	(Reset) 0V (Normal) 4.7V
2	Digital line	(Power off) 11.8V (Power on) 0V
3	(FM-ST) 0V (Others) 5.2V	10.3V -
4	Digital line	0V
5	(Tuning) 0V (Others) 5.1V	-9.7V -
6	Digital line	11.1V
7	Digital line	0V
8	Digital line	-30.7V
9	Digital line	-21.3V
10	(Mute) 5.6V (Normal) 0V	-21.3V -

Pin No.	IC551 Voltage	IC501 Voltage
1	2.4V	2.2V
2	Digital line	2.2V
3	Digital line	2.2V
4	Digital line	2.2V
5	Digital line	0V
6	NC	(Tuning) 0V (Others) 5.3V
7	NC	(FM stereo) 0V (Others) 5.3V
8	NC	3.8V
9	Digital line	5.3V
10	(FM Auto) 5.3V (FM Mono) 0V	(Scan/Mute) 1.5V (Stop) 0V
11	(NTSC) 5.3V (PAL) 0V	(FM) 4.0V (Others) 3.0V
12	NC	(FM) 4.0V (Others) 3.0V
13	(LW/FM) 9.4V (MW) 0.1V	(FM Auto) 4.3V (Others) 3.0~3.6V
14	NC	1.3V
15	0V	1.3V
16	0V	2.2V
17	(LW/MW) 9.4V (FM) 0.2V	(FM) 2.3V (Others) 0V
18	(LW/MW) 2.7V (FM) 0V	2.1V -
19	(FM) 2.7V (LW/MW) 0V	(FM) 2.2V (Others) 1.5V
20	5.3V	2.2V
21	NC	2.2V
22	0.49~0.53V	2.2V
23	0V	5.3V
24	2.4V	3.9V

IC DESCRIPTION

IC, CXP82532-123Q

Pin No.	Pin Name	I/O	Description
1	I-HOLD	I	The present state is backed up when "L" = input.
2	I-REMOTE	I	Remote control signal input.
3	I-TUNE	I	Frequency disply and sending data to PLL are stopped during tuner reception. (L=input)
4	O-CLK TU	O	TU PLL clock.
5	O-PLL CE	O	TU PLL chip enable.
6	O-STB DSP	O	STB for DSP
7	O-LED GEQ	O	Light on when GEQ MANUAL.
8	O-CLK	O	CLK for shift register and DSP.
9	O-CLKD GEQ	O	CLK for electronic GEQ.
10	O-DATA	O	Data for shift register, TU and electronic GEQ.
11	I/O-SERIAL	I/O	I/O for FD communication.
12	I-DATA TU	I	Data input from TU PLL.
13	O-STB SR	O	STB for shift register.
14~19	O-LED 1~6	O	Output to light GEQ LEDs. "L" to light.
20	I-INITIAL	I	Input to initially set the micro-computer shipment destination.
21	I-TRAY OPEN	I	CONTROL TRAY OPEN detect switch input. "L" when TRAY OPEN.
22~25	I-KEY 1~4	I	Key A/D input.
26	O-FS.RESET	I	SPECTRUM ANALYZER IC RESET output.
27	I-SPE	I	SPECTRUM ANALYZER IC OUT input.
28	I-MIC	I	Mic input signal / Auto VF control.
29	O-STB VOL	O	STB for C/S-ch trim electronic vol.
30	I-RST	I	Reset input. Reset when "L".
31,32	EXTAL/XTAL	O/I	Oscillation crystal connection pin. (7.6MHz)
33	GND	-	Ground.
34	O-LED PRGM	O	Output "H" when GEQ PROGRAM.
35	O-LED TU	O	Output to light TU PRESET LED. "H" when TUNER function.
36	O-LED VOL	O	Output to light VOL LED. "H" when VOL LED light.
37,38	O-LED DSP A/B	O	Encode output for DSP LED display.
39~41	O-SEG 1~3/SPE SW YZ	O	Segment output and spectrum analyzer IC control output to light FL.
42~48	O-SEG 1~3	O	Segment output and the initial set D-matrix output to light FL.
49~58	O-SEG 1~3	O	Segment output to light FL.
59~70	O-GRID 12~1	O	Grid output to light FL.
71	-VFL	I	Pull down resistor common terminal for FL. (-28V)
72	VDD	I	Power supply. (+5V)
73	NC	I	Connected to VDD. (Not used)
74	O-LED DSP	O	Encode output for DSP LED display.
75	I-ST/BIL	I	FL stereo mark lights when "L" is input.
76	O-MUTE	O	Muting output. (Mute on when "L")
77	O-POWER	O	"L" output during power ON.
78,79	G1/G12	I	Timing-1/2 from SPECTRUM ANALYZER.
80	I-TIME B	I	CLK (8kHz) input for clock.

IC, LC7218

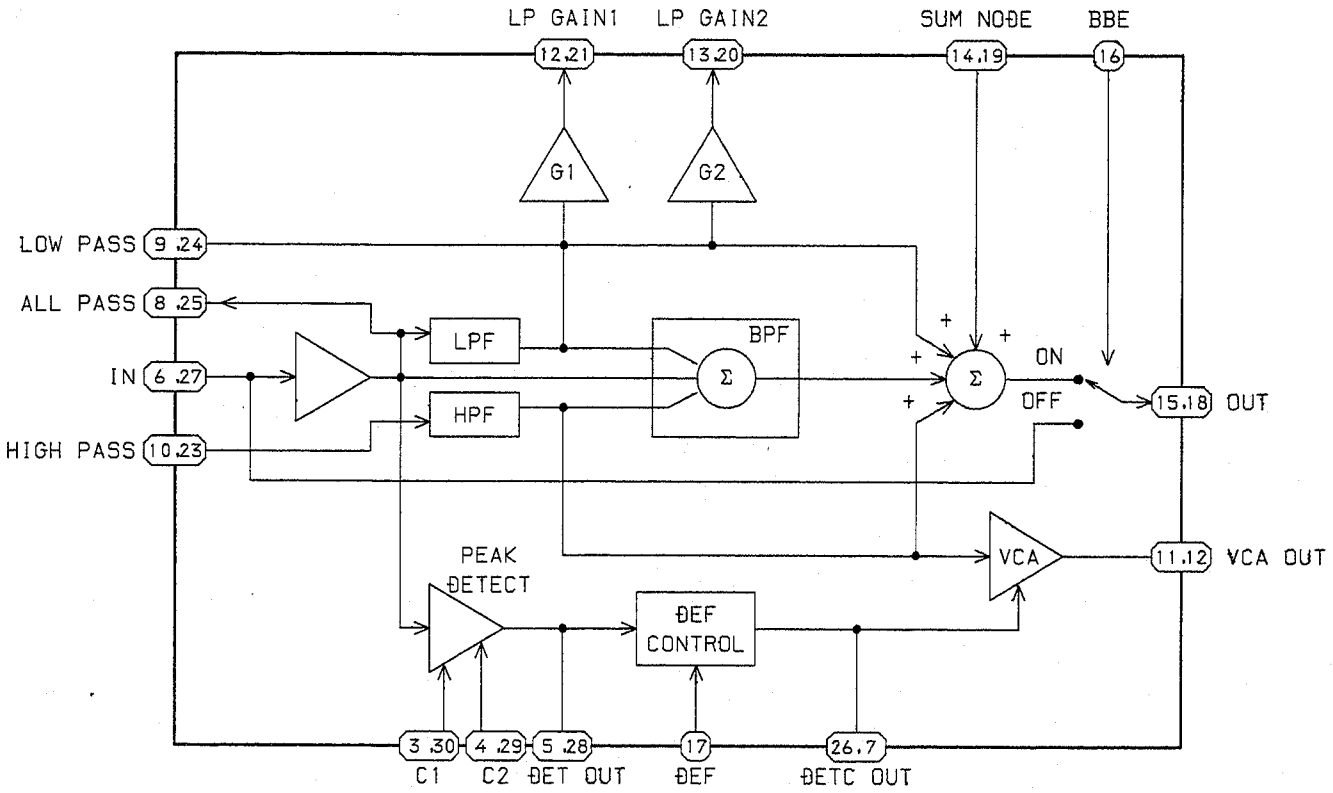
Pin No.	Pin Name	I/O	Description
1	XI	I	Connected to the crystal clock oscillator.
2	PLL CE	I	Input terminal of control data from microcomputer CXP82324-123Q.
3	O-DATA	I	
4	CLK	I	
5	DATA TU	O	Tuner data output.
6	-	-	Not used.
7	-	-	Not used.
8	-	-	Not used.
9	T-BASE	O	Clock time base output.
10	1	O	AUTO/$\overline{\text{MONO}}$ NTSC/$\overline{\text{PAL}}$ (except TUNER)
11	2	O	
12	AUTO-H	O	Not used.
13	MW-L	O	Tuner band selection output. (Not used.)
14	-	-	Not used.
15	LCTR	-	AM IF frequency input.
16	RCTR	-	FM IF frequency input.
17	FM-L	O	Tuner band selection output. $\overline{\text{FM}}$/AM
18	AM-I	I	AM oscillation frequency input.
19	FM-I	I	AM oscillation frequency input.
20	VDD	-	+5V power supply terminal.
21	EO	O	Tuning voltage control output.
22	EO	-	Not used.
23	VSS	-	Ground.
24	XO	O	Connected to the crystal clock oscillator.

IC, NJU7305M

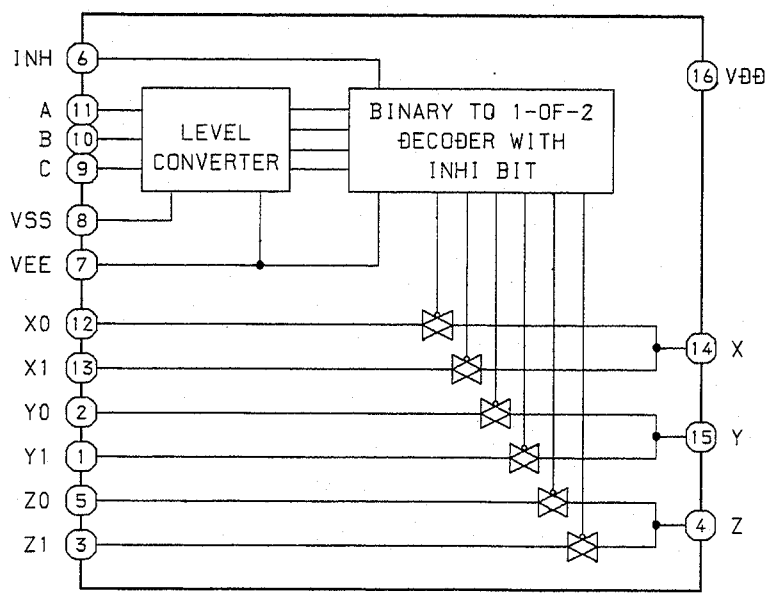
Pin No.	Pin Name	I/O	Description
1	VDD	-	Supply for voice signal. (+7.5V)
2,29	IN1L, IN1R	I	Voice signal input terminals.
3,28	IN2L, IN2R	I	Voice signal input terminals.
4~10	fL1 ~ fL7	I	Band filter connect terminals.
11	TEST1	-	Terminal for test in Internal Chip.
12	NC	-	Not used.
13	TEST2	-	Terminal for test in Internal Chip.
14	S	I	Input terminal of chip select signal from CPU.
15	VEE	-	Supply for voice signal. (-7.5V)
16	VCC	-	Voltage supply. (+5V)
17	DI	I	Input terminal of serial data from CPU.
18	CLK	I	Input terminal of clock from CPU.
19	NC	-	Not used.
20	VSS	-	Ground.
21~27	fR1~fR7	I	Band filter connect terminals.
30	NC	-	Not used.

IC BLOCK DIAGRAM

IC, XR1071CP



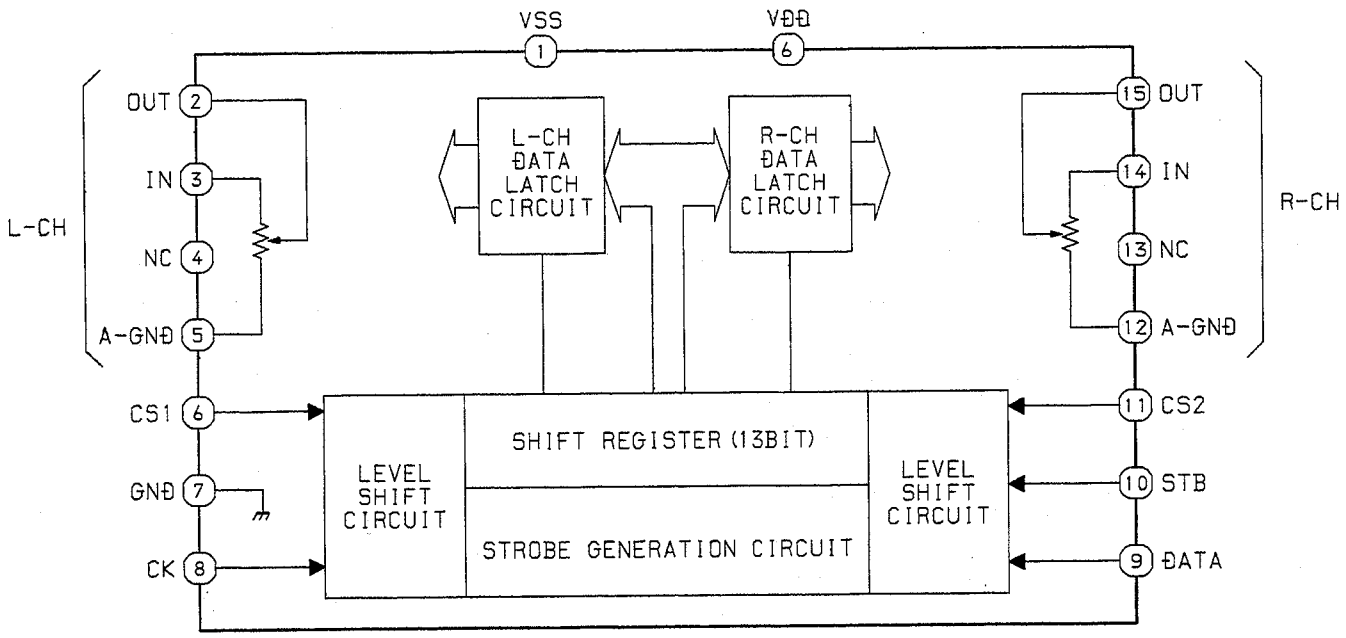
IC, MC14053BF



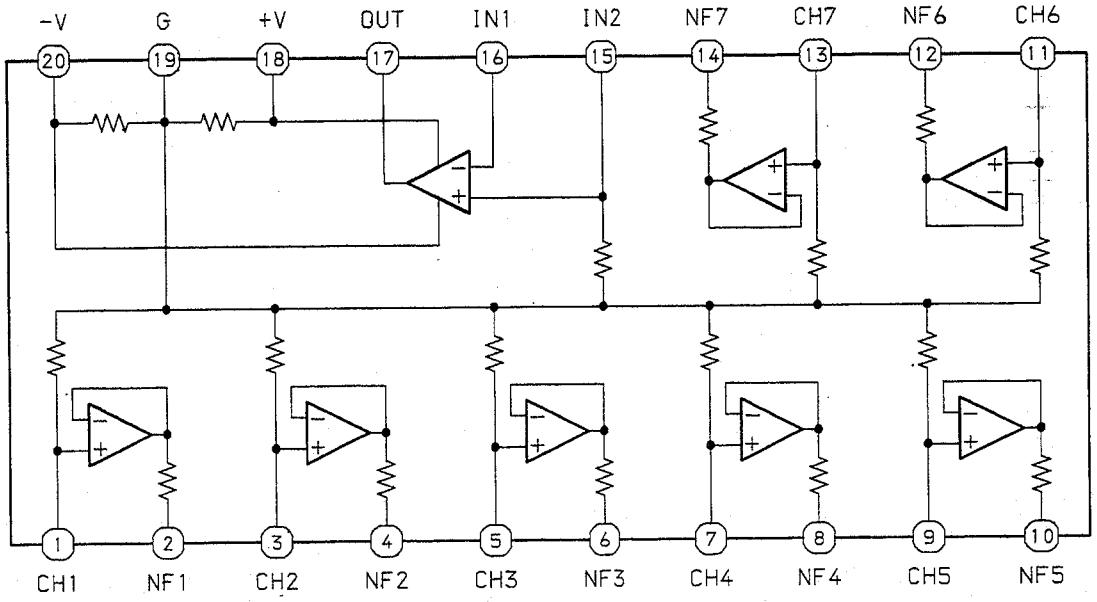
LOGIC TABLE

CONTROL INPUT		ON SWITCHS
INHI BIT	SELECT	
	C B A	MC14053BF
0	0 0 0	Z0 Y0 X0
0	0 0 1	Z0 Y0 X1
0	0 1 0	Z0 Y1 X0
0	0 1 1	Z0 Y1 X1
0	1 0 0	Z1 Y0 X0
0	1 0 1	Z1 Y0 X1
0	1 1 0	Z1 Y1 X0
0	1 1 1	Z1 Y1 X1
1	X X X	NONE

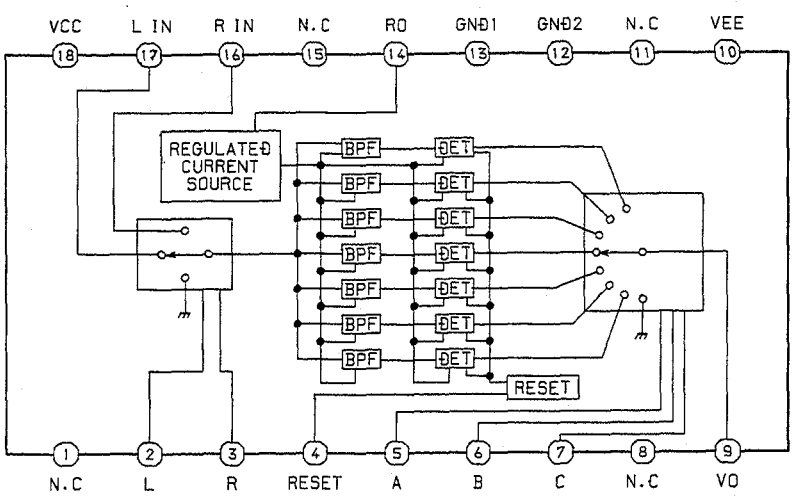
IC, TC9299P



IC, M5229FP



IC, BA3826S



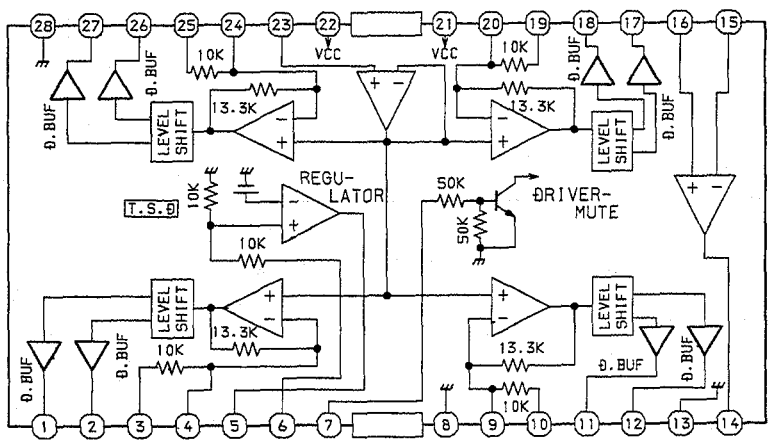
INPUT SELECTOR LOGIC TABLE

SELECTOR		INPUT
L (5PIN)	R (6PIN)	
L	L	UNDETERMINED 不定
L	H	L IN
H	L	R IN
H	H	OFF

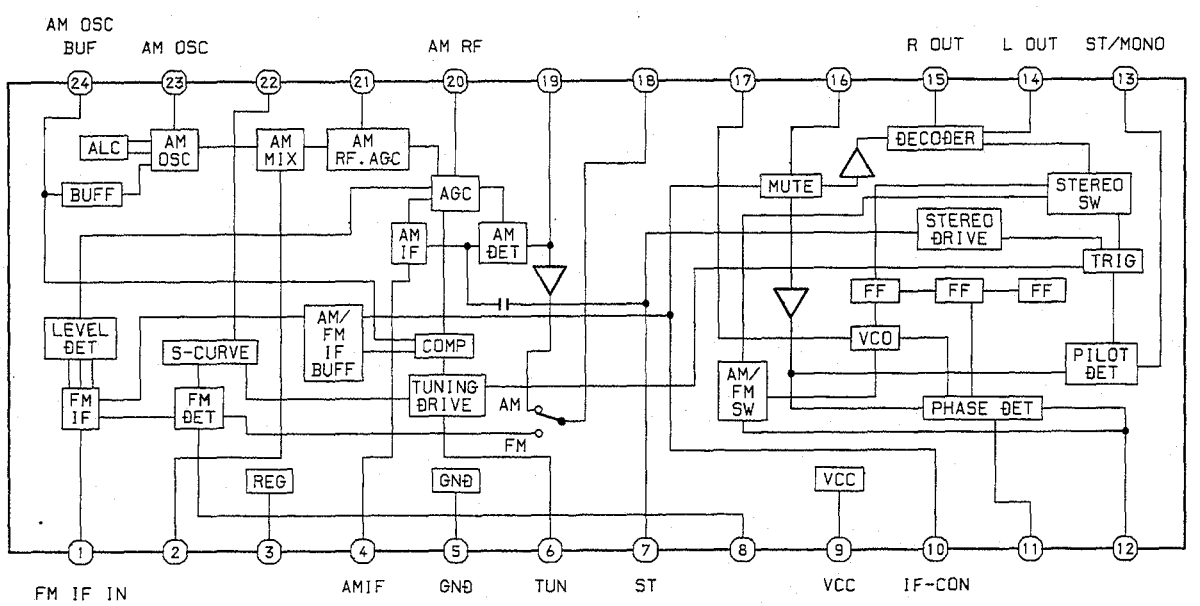
OUTPUT SELECTOR LOGIC TABLE

SELECT			OUTPUT
A (5PIN)	B (6PIN)	C (7PIN)	C (7PIN)
H	H	H	0
L	H	H	F01
H	L	H	F02
L	L	H	F03
H	H	L	F04
L	H	L	F05
H	L	L	F06
L	L	L	F07

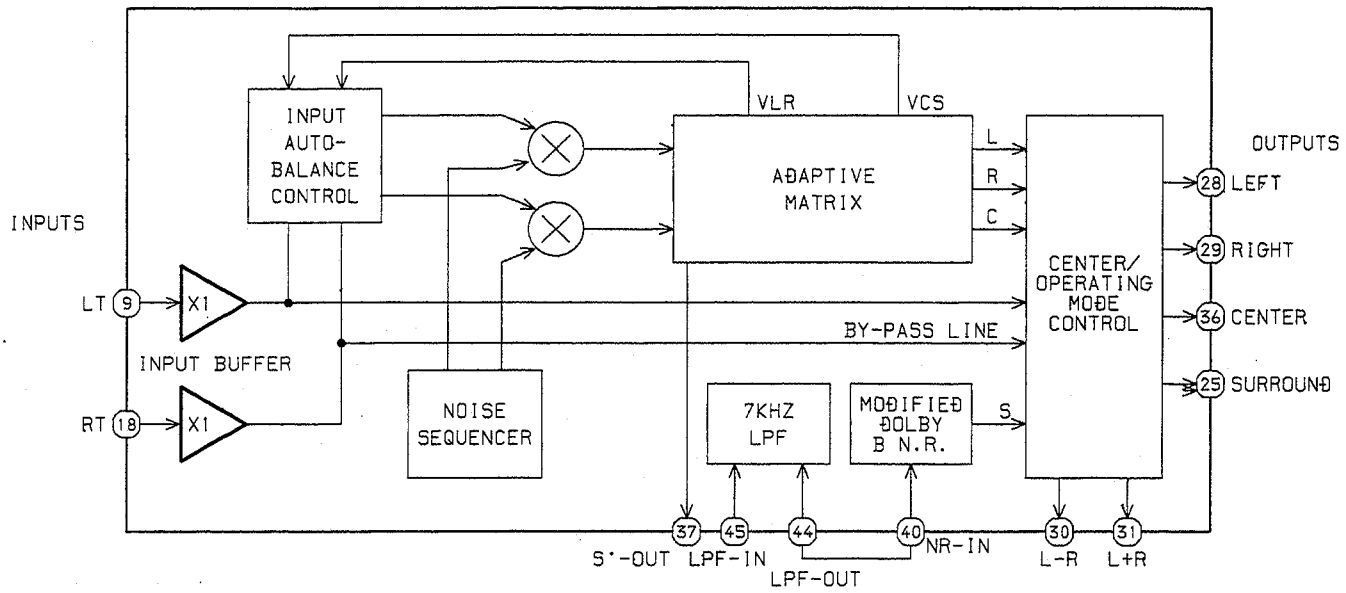
IC, BA6397FP



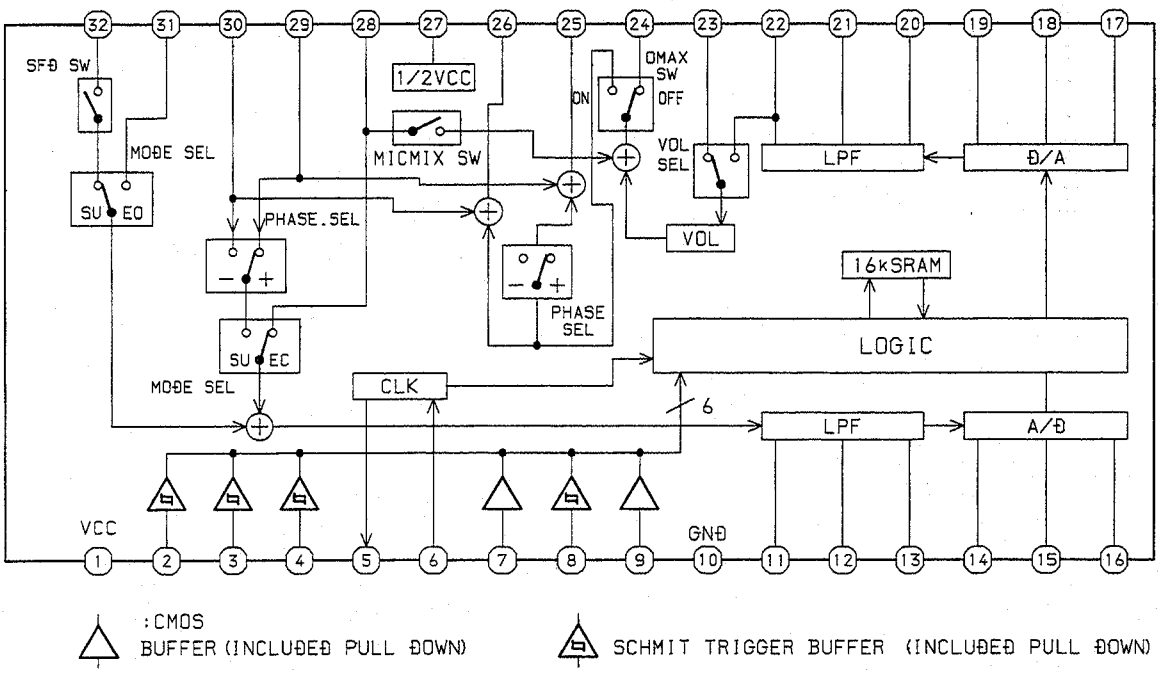
IC, LA1831M



IC, NJM2177AF

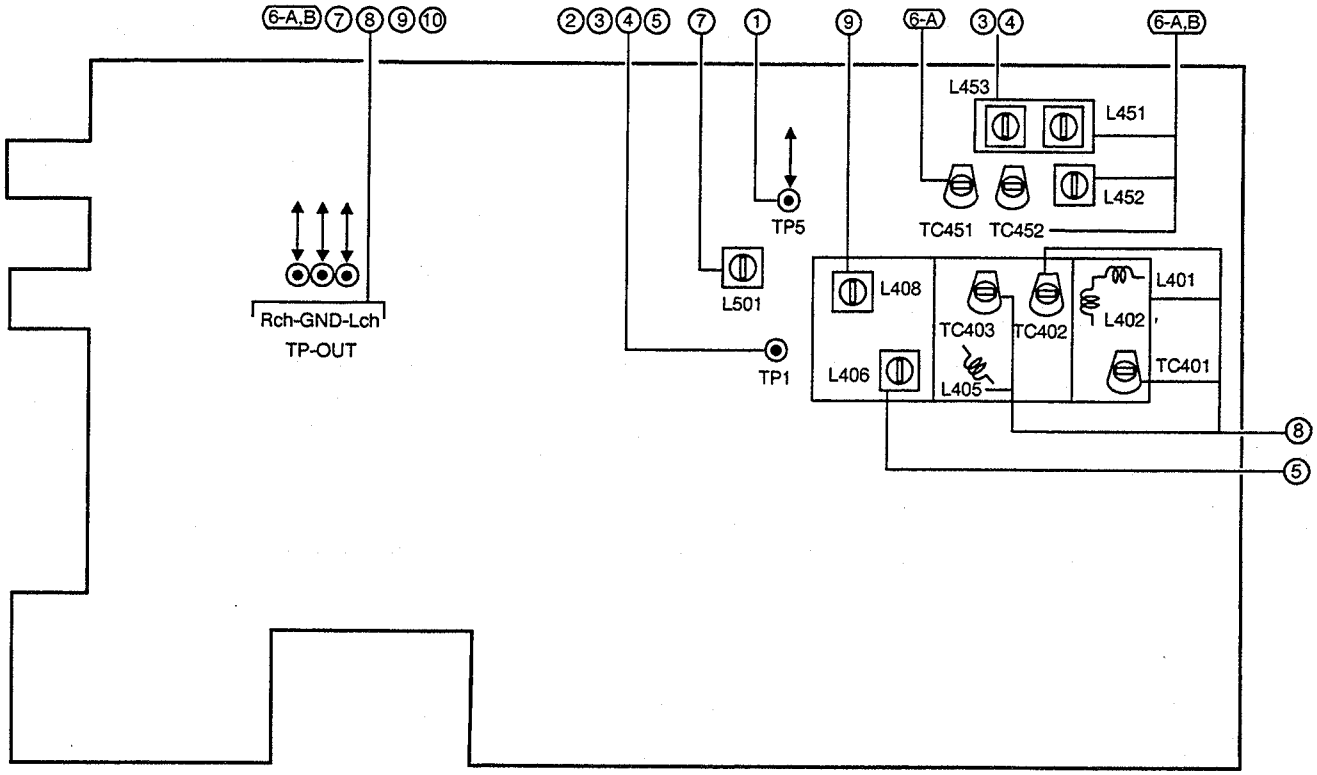


IC, M65846FP-600D



ADJUSTMENT <TUNER SECTION>

Ⓐ MAIN C.B



< TUNER SECTION >

1. Clock Frequency Adjustment
   Settings : •Test point : TP5
   Method : Set to MW 1602kHz (HE,HK,HR,K,E,EZ,EEZ), 1710kHz (LH,U) and check that the test point is 2052kHz ± 0.05kHz (HE,HR,K,E,EZ,EEZ), 2160kHz ± 0.05kHz (LH,U).

2. MW VT Check (HE,HK,HR,LH,U only)
   Settings : •Test point : TP1
   Method : Set to MW 531kHz (HE,HK,HR), 530kHz (LH,U) and check that the test point is 1.1V ± 0.2V (LH).

3. MW VT Adjustment (E,EZ,EEZ,K only)
   Settings : •Test point : TP1
   •Adjustment location : L453
   Method : Set to MW 531kHz and adjust L453 so that the test point becomes 1.1V ± 0.2V.

4. LW VT Adjustment (E,EZ,EEZ,K only)
   Settings : •Test point : TP1
   Method : Set to LW 144kHz so that the test point becomes 1.3V ± 0.05V.

5. FM VT Adjustment
   Settings : •Test point : TP1
   •Adjustment location : L406
   Method : Set to FM 108MHz and adjust L406 so that the test point becomes 9.4V ± 0.05V.

6A. MW Tracking Adjustment (E,EZ,EEZ,K)
   Settings : •Test point : TP-OUT
   •Adjustment location : L451
   MW
   L451.....603kHz
   TC451.....1404kHz
   Method : Set up TC451 to center before adjustment. The level at 603kHz is adjusted to MAX by L451. Then the level at 1404kHz is ajusted to MAX by TC451.
   After adjustment, proceed the MW tracking check.
   Set to MW 999kHz (E,EZ,EEZ,K), MW 1000kHz (LH,U) and check that the test point is less than 59dB.

6B. LW Tracking Adjustment (E,EZ,EEZ,K)
   L452.....144kHz
   TC452.....299kHz
   Method : Set up TC452 to center before adjustment. The level at 144kHz is adjusted to MAX by L452. Then the level at 299kHz is ajusted to MAX by TC452.

7. MW/LW IF Adjustment
   Settings : •Test point : TP-IF
   L501.....450kHz

8. FM Tracking Adjustment
   Settings : •Test point : TP-OUT
   •Adjustment location :
   TC401,TC402.....108MHz
   TC403.....108MHz (E,EZ,EEZ,K only)
   L401,L402.....87.5MHz
   L405.....87.5MHz (E,EZ,EEZ,K only)

9. FM IF Adjustment
   Settings : •Test point : TP-OUT
   L408.....98.0MHz

10. FM Separation Check
   Settings : •Test point : TP-OUT
   Method : Set to FM 98.0MHz and check the separation at TP-OUT is more than 25dB.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity :	4dB ± 4dB (HE,HR,LH,U)
(THD 3%)	(at 87.5, 98.0, 108.0MHz)
	8dB ± 4dB (E,EZ,EEZ,K)
	(at 87.5, 98.0, 108.0MHz)
S/N 50dB Quieting sensitivity :	
(HE,HR,LH,U)	Less than 36dB
	(87.5, 98.0, 108.0MHz)
S/N 46dB Quieting sensitivity :	
(E,EZ,EEZ,K)	Less than 44dB
	(at 87.5, 98.0, 108.0MHz)
Signal to noise ratio :	More than 64dB at 98.0MHz
	(HE,HR,LH,U)
	More than 59dB at 98.0MHz
	(E,EZ,EEZ,K)
Distortion :	Less than 1.5%
Stereo separation :	More than 25dB
Intermediate frequency :	10.7MHz

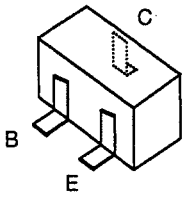
<MW SECTION>

Sensitivity :	56dB ± 5dB at 600kHz (LH,U)
(S/N 20dB)	56dB ± 5dB at 603kHz (HE,HR)
	62dB ± 5dB at 603kHz (E,EZ,EEZ,K)
	53dB ± 5dB at 1000/1400kHz (LH,U)
	53dB ± 5dB at 999/1404kHz (HE,HR)
	55dB ± 5dB at 999/1404kHz
	(E,EZ,EEZ,K)
Distortion :	Less than 1.6% at 1000kHz
Intermediate frequency :	450kHz

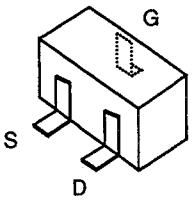
<LW SECTION> (E,EZ,EEZ,K only)

Sensitivity :	65dB ± 5dB (at 144kHz)
(S/N 20dB)	62dB ± 5dB (at 198kHz)
	60dB ± 5dB (at 290kHz)
Distortion :	Less than 1.5% (at 198kHz)
Intermediate frequency :	450kHz

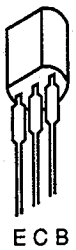
TRANSISTOR ILLUSTRATION



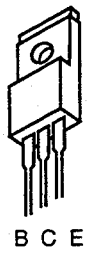
DTA114EK/TK/YK
DTA143XK
DTC114EK/TK/YK
DTC143XK
2SC3326B
2SC2712GR
2SC2714 (O)
2SA1162GR



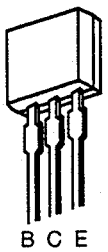
2SK209Y



2SA1296GR
2SC1740S



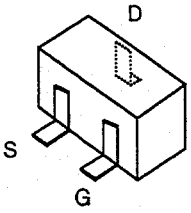
2SB1370E



DTA114TK
2SC1740S

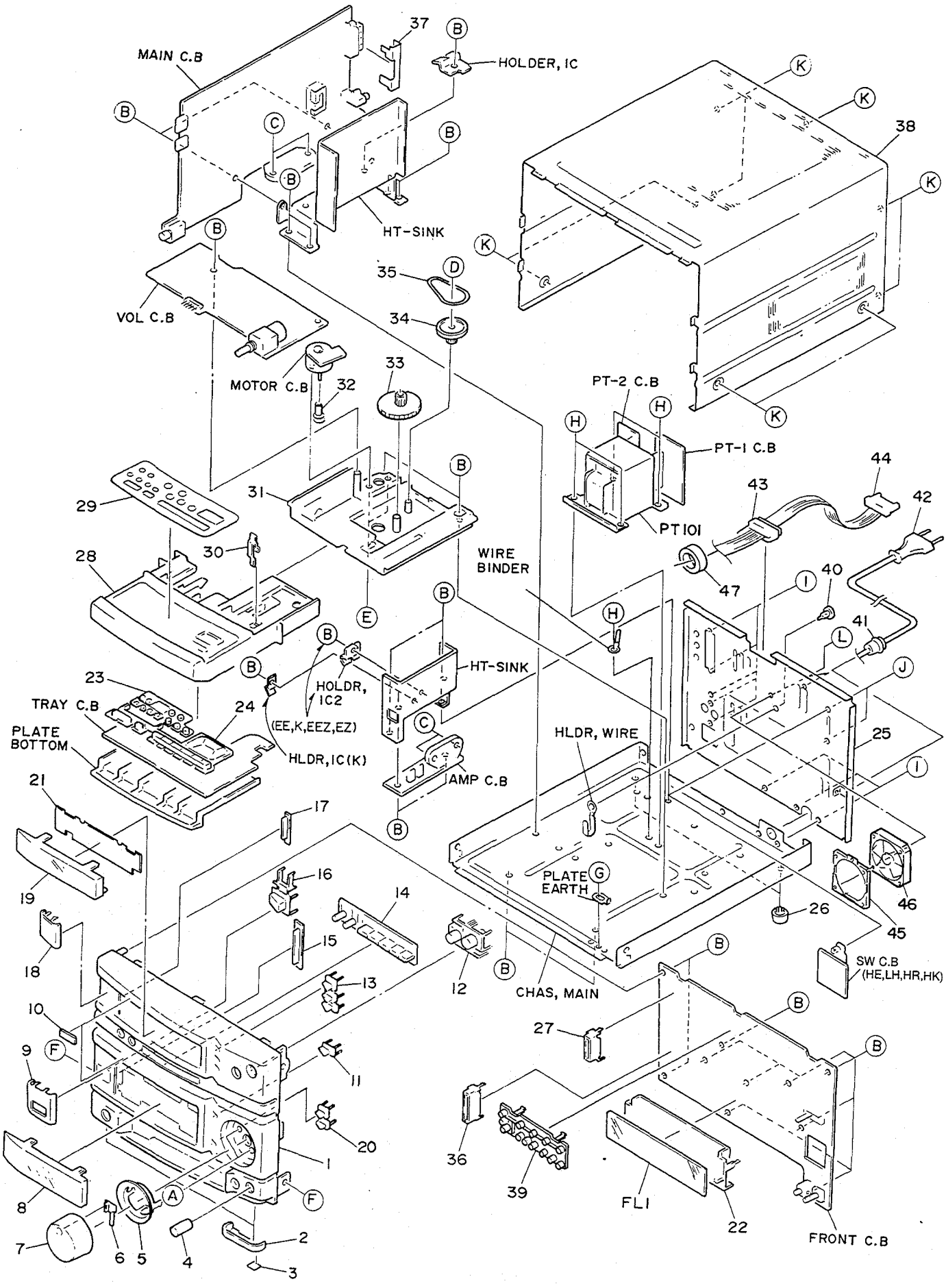
2SA1318TU
2SA1015GR
2SC3331TU
2SC1815GR
2SC3266GR

2SD2005



2SK360E

MECHANICAL EXPLODED VIEW 1/1



MECHANICAL PARTS LIST 1/1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	85-NT1-002-019		CAB,FR E<K,EE,EEZ,EZ,LH>
1	85-NT1-001-019		CAB,FR H<HE,HR,HK>
1	85-NT1-003-019		CAB,FR U<U>
2	82-NT1-036-019		RING,FOOT
3	80-VT1-202-019		FELT,12.5-15.5-2
4	80-MT3-014-019		KNOB,MIC
5	85-NT1-008-019		RING,VOL
6	82-NE6-016-019		IND,MAIN VOL
7	85-NT1-012-019		KNOB,VOL
8	82-NT1-028-019		WINDOW,AMP
9	82-NT1-045-019		DUMMY,POWER
10	81-MX4-032-019		BADGE,AIWA N
11	85-NT1-011-019		KEY,DSP
12	82-NT1-018-010		KEY,UP/DOWN
13	85-NT1-009-019		KEY,TU
14	82-NT1-020-019		KEY,FUN
15	82-NT1-026-019		IND,AMP
16	82-NT1-015-019		KEY,POWER
17	82-NT1-027-019		IND,TU
18	82-NT1-017-019		DUMMY
19	82-NT2-016-119		WINDOW TU 2
20	85-NT1-010-019		KEY,OPEN
21	85-NT1-007-019		PLATE,DISPLAY
22	81-DS2-204-219		GUIDE,FL
23	82-NT2-018-119		KEY,GE 2<EXCEPT HE,HR,HK>
23	85-NT1-025-019		KEY,GE H<HE,HR,HK>
24	82-NT1-022-119		KEY,T-BASS
25	85-NT1-018-019		PANEL,REAR EZBN<EEZ,EZ>
25	85-NT1-013-019		PANEL,REAR HEJBN<HE>
25	85-NT1-014-019		PANEL,REAR HRJBN<HR>
25	85-NT1-017-019		PANEL,REAR KBN<K>
25	85-NT1-015-019		PANEL,REAR LHBN<LH>
25	85-NT1-016-019		PANEL,REAR UBN<U>
25	85-NT1-026-019		PANEL,REAR EEBN<EE>
25	85-NT1-027-019		PANEL,REAR HKJBN<HK>
26	87-085-213-019		FOOT,H12.5
27	82-NT1-219-019		GUIDE,LED 2
28	85-NT1-005-019		CAB,TRAY E<K,EE,U,EEZ,EZ>
28	85-NT1-004-019		CAB,TRAY H<HE,LH,HR,HK>
29	85-NT1-006-019		PLATE,TRAY<EXCEPT HE,HR,HK>
29	85-NT1-024-019		PLATE,TRAY H<HE,HR,HK>
30	81-MT3-211-019		LEVER,OPEN
31	82-NT1-203-319		HLDR,TRAY
32	80-VW1-204-010		PULLEY,MOTOR
33	82-NT1-204-01K		GEAR,LOADING
34	82-NT1-205-11K		PULLEY,LOADING
35	80-VW1-217-010		BELT,SQ 1.5
36	82-NT1-207-019		GUIDE,LED
37	87-033-214-019		ANT TERM 4P JT<HE,U,LH,HR,HK>
37	81-631-646-019		ANT TERM 2P PAL<K,EE,EEZ,EZ>
38	83-NT1-013-019		CAB,STEEL<HE,LH,HK>
38	83-NT1-014-019		CAB,STEEL HI<EXCEPT HE,LH,HK>
39	85-NT1-201-019		GUIDE,LED
40	87-084-077-019		NYLON RIVET DIA 3.5 - 4.5
41	87-085-185-010		BUSHING,AC CORD E<EXCEPT U>
41	87-085-189-010		BUSHING,CORD U<U>
⚠ 42	87-050-100-019		AC CORD ASSY K3P<K>
⚠ 42	87-050-034-019		AC CORD ASSY,E<EXCEPT K,U>
⚠ 42	87-050-053-019		AC CORD ASSY,U-2<U>
⚠ 42	87-099-811-018		PLUG ADAPTOR CONV (K)<HK>
43	89-VT5-202-019		BUSHING,CORD
44	82-NT1-664-019		CORD,FG 15P
45	83-NT1-204-019		HLDR,FAN<EXCEPT HE,LH,HK>
46	87-045-365-010		FAN,MOT F614R-12MC<EXCEPT HE,LH,HK>
47	87-003-317-019		F-BEAD FOH2515-LG7)<K,EE,EEZ,EZ>
A	87-067-703-019		BVT2+3-10(W/O SLOT)
B	87-067-579-019		BVT 2+3-8 W/O SLOT
C	87-067-581-019		BVT2+3-15W/O SLOT
D	87-861-095-419		VFT2+3-8 SLOT
E	87-261-073-419		V+2.6-6
F	87-591-094-419		QIT+3-6GLD
G	87-571-093-419		VIT+3-5
H	87-078-019-019		S-SCREW,IT+4-6
I	87-067-660-019		BVT2+3-8W/O SLOT BLK
J	80-VP2-202-019		SPECIAL SCREW VT2BLK<HE,LH,HR,HK>
K	87-067-641-019		UTT2+3-8 W/O SLOT BLK
L	87-263-102-419		V+3-20(ISD) BLK<EXCEPT HE,LH,HK>

MODEL NO.

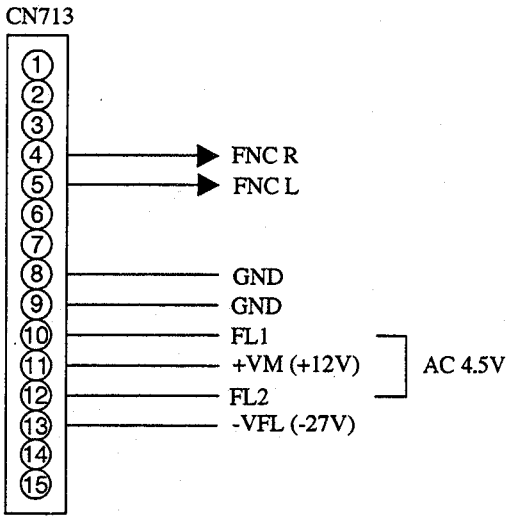
FD-N858

CAUTIONS WHEN SERVICING

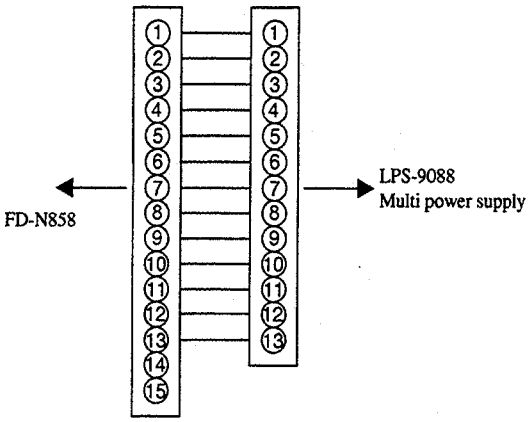
FD-N858 do not have a power . These equipment use a 15 pin flat cable
to receive the power supply and to output and input signals
When repairing, connect it to RX-N858.

If there is no RX-N858, repair it as follows. (Although it is possible to dub a tape, it is not possible to record from a CD or another external device.)

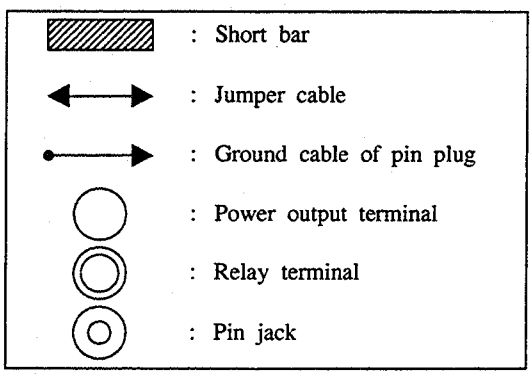
[Repairing a single machine.]
1. Supply the following voltage to each terminal from the external power



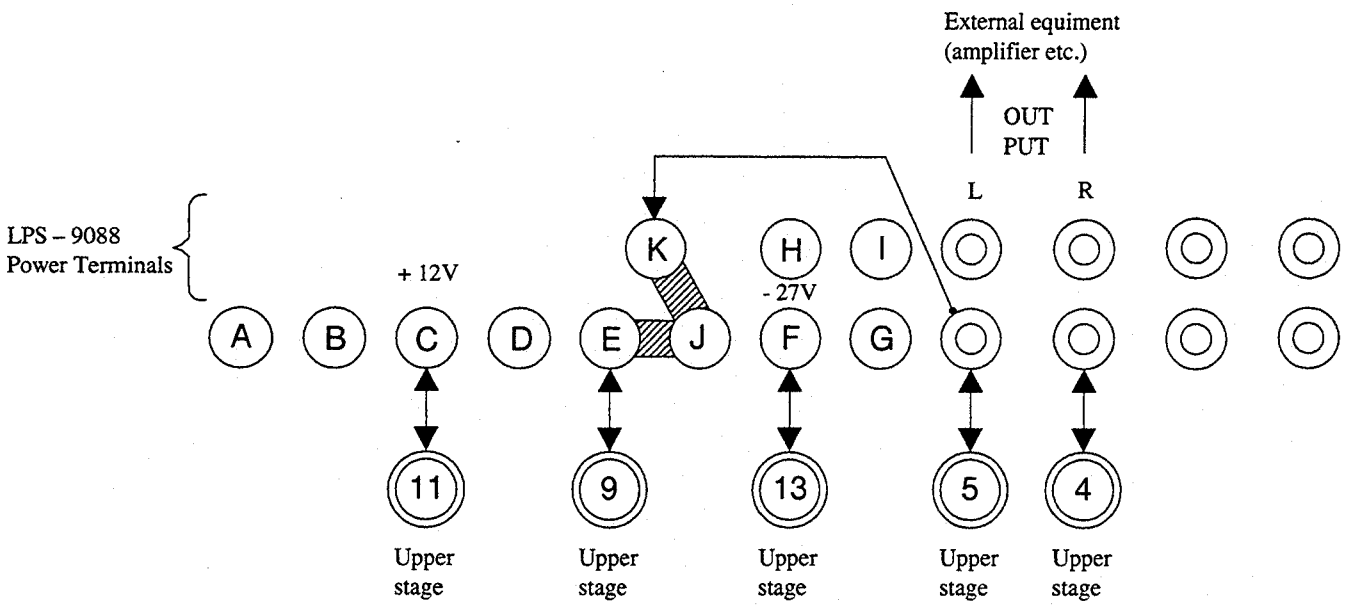
2. Multi Power Connection diagram (LPS-9088)
• Connect the harness which is connected to CORD FG 15P and CONNECTOR ASSY 13P to J1.



Connect a multi – conversion harness.



Connection of multi-conversion harness diagram.
(Because AC 4.5V is not supplied, FL does not light.)

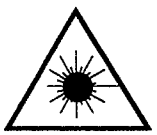


[How to turn on the power }
Press the DECK STOP key while holding down the CD PLAY key.

PROTECTION OF EYES WHEN SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

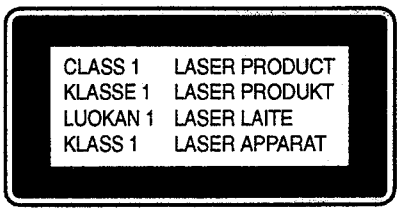
VARNING!
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!
Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

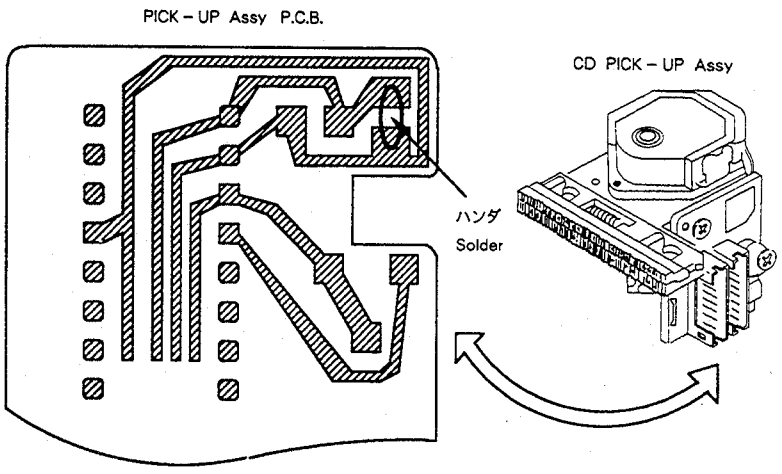


PRECAUTION TO REPLACE OPTICAL BLOCK

(KSS – 210A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in figure below.



ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-020-793-080		IC,CXA1081M
	87-020-794-110		IC,CXA1082BQ
	87-001-944-010		IC,CXD1167Q
	87-017-486-080		IC,BA6397FP
	87-017-194-010		IC,PLT104
	87-020-618-310		IC,DM6851
	87-017-022-080		IC,NJM2068M-D(T1)
	87-017-822-080		IC,SM5875BM
	87-001-224-080		IC,NJU4066BM
	82-NV1-625-210		IC,UPD78043GF-063
	87-002-394-010		IC,LB1641
	87-001-607-080		IC,NJM4558M
	87-017-726-080		IC,BU4052BCF
	87-001-908-010		IC,CXA1332S
	87-002-872-080		IC,MC14053BF
	87-020-730-080		IC,TC4069UBF
	87-017-915-080		IC,BU4094BCF
TRANSISTOR			
	87-026-463-010		TR,2SA933S
	89-109-521-080		TR,2SA952K
	89-327-125-080		C-TR,2SC2712GR
	87-026-210-080		C-TR,DTC144EK T147
	87-026-238-080		C-TR,DTC144WK
	89-113-625-080		C-TR,2SA1362GR(TAPG)
	89-213-702-010		TR,2SB1370E
	89-333-317-880		TR,2SC3331TU
	89-320-011-080		TR,2SC2001K
	89-503-685-080		C-FET,2SK368GR
	87-026-233-080		C-TR,DTA114TK
	89-333-266-080		C-TR,2SC3326B
	87-026-608-080		C-TR,DTC123JK
	87-026-228-080		C-TR DTA124EK
	89-318-155-080		TR,2SC1815GR
DIODE			
	87-020-465-080		DIODE,1SS133
	87-017-097-080		ZENER,HZS6B1
	87-002-608-080		DIODE,DSF10TC
	87-017-121-080		ZENER,HZS11A1
	87-020-123-080		DIODE,DS446-AT (TA)
	87-001-290-080		ZENER,HZS6B1L
	87-001-559-080		DIODE,ISS131 (T-72)
CD C.B			
C1	87-010-184-080		C-CAP,S 3300P-50 B
C2	87-010-263-080		CAP,E 100-10 SME 5X11
C3	87-010-178-080		C-CAP,S 1000P-50 B
C4	87-010-374-080		CAP,E 47-10
C5	87-010-248-080		CAP,E 220-10 SME
C6	87-010-197-080		C-CAP,S 0.01-25 B
C7	87-010-193-080		C-CAP,S 0.033-25 F
C8	87-010-193-080		C-CAP,S 0.033-25 F
C9	87-010-197-080		C-CAP,S 0.01-25 B
C10	87-010-400-080		CAP,E 0.47-50 SME
C11	87-010-248-080		CAP,E 220-10 SME
C12	87-010-197-080		C-CAP,S 0.01-25 B
C13	87-010-197-080		C-CAP,S 0.01-25 B
C14	87-010-193-080		C-CAP,S 0.033-25 F
C15	87-010-197-080		C-CAP,S 0.01-25 B
C16	87-010-184-080		C-CAP,S 3300P-50 B
C17	87-010-196-080		C-CAP,S 0.1-25 F
C18	87-010-193-080		C-CAP,S 0.033-25 F
C19	87-010-405-080		CAP,E 10-50 SME
C20	87-010-196-080		C-CAP,S 0.1-25 F
C21	87-010-382-080		CAP,E 22-25 SME
C22	87-010-401-080		CAP,E 1-50 SME
C24	87-010-197-080		C-CAP,S 0.01-25 B
C25	87-010-263-080		CAP,E 100-10 SME 5X11
C26	87-010-197-080		C-CAP,S 0.01-25 B
C27	87-010-263-080		CAP,E 100-10 SME 5X11
C28	87-010-197-080		C-CAP,S 0.01-25 B
C29	87-010-404-080		CAP,E 4.7-50 SME
C30	87-010-374-080		CAP,E 47-10
C31	87-010-178-080		C-CAP,S 1000P-50 B
C32	87-010-184-080		C-CAP,S 3300P-50 B
C33	87-010-193-080		C-CAP,S 0.033-25 F
C34	87-010-400-080		CAP,E 0.47-50 SME
C35	87-010-197-080		C-CAP,S 0.01-25 B
C36	87-010-196-080		C-CAP,S 0.1-25 F
C37	87-010-404-080		CAP,E 4.7-50 SME
C38	87-010-263-080		CAP,E 100-10 SME 5X11
C39	87-010-196-080		C-CAP,S 0.1-25 F
C40	87-010-193-080		C-CAP,S 0.033-25 F
C41	87-010-221-080		CAP,E 470-10
C42	87-010-316-080		C-CAP,S 33P-50 CH
C43	87-010-221-080		CAP,E 470-10
C44	87-010-197-080		C-CAP,S 0.01-25 B
C45	87-010-248-080		CAP,E 220-10 SME
C46	87-010-197-080		C-CAP,S 0.01-25 B
C47	87-010-196-080		C-CAP,S 0.1-25 F
C48	87-010-196-080		C-CAP,S 0.1-25 F
C49	87-010-196-080		C-CAP,S 0.1-25 F
C50	87-010-196-080		C-CAP,S 0.1-25 F
C52	87-010-263-080		CAP,E 100-10 SME 5X11
C53	87-010-197-080		C-CAP,S 0.01-25 B
C54	87-010-314-080		C-CAP,S 22P-50 CH
C55	87-010-314-080		C-CAP,S 22P-50 CH
C101	87-010-263-080		CAP,E 100-10 SME 5X11
C102	87-010-196-080		C-CAP,S 0.1-25 F
C103	87-010-221-080		CAP,E 470-10
C104	87-010-196-080		C-CAP,S 0.1-25 F
C105	87-010-196-080		C-CAP,S 0.1-25 F
C106	87-010-316-080		C-CAP,S 33P-50 CH
C107	87-010-316-080		C-CAP,S 33P-50 CH
C108	87-010-197-080		C-CAP,S 0.01-25 B
C109	87-010-178-080		C-CAP,S 1000P-50 B
C110	87-010-178-080		C-CAP,S 1000P-50 B
C111	87-012-140-080		C-CAP,S 470P-50 CH
C112	87-012-140-080		C-CAP,S 470P-50 CH
C115	87-010-405-080		CAP,E 10-50 SME
C116	87-010-405-080		CAP,E 10-50 SME
C117	87-012-157-080		C-CAP,S 330P-50 CH
C118	87-012-157-080		C-CAP,S 330P-50 CH
C125	87-010-196-080		C-CAP,S 0.1-25 F
C201	87-010-263-080		CAP,E 100-10 SME 5X11
C202	87-010-196-080		C-CAP,S 0.1-25 F
C203	87-010-401-080		CAP,E 1-50 SME
C204	87-010-405-080		CAP,E 10-50 SME
C205	87-010-405-080		CAP,E 10-50 SME
C206	87-010-405-080		CAP,E 10-50 SME
C207	87-010-196-080		C-CAP,S 0.1-25 F
C208	87-010-178-080		C-CAP,S 1000P-50 B
C209	87-010-178-080		C-CAP,S 1000P-50 B
C211	87-010-235-080		CAP,E 470-16 SME
C212	87-010-197-080		C-CAP,S 0.01-25 B
C213	87-010-196-080		C-CAP,S 0.1-25 F
C214	87-010-197-080		C-CAP,S 0.01-25 B
C216	87-010-382-080		CAP,E 22-25 SME
C301	87-010-237-080		CAP,E 1000-16
C302	87-010-178-080		C-CAP,S 1000P-50 B
C303	87-010-221-080		CAP,E 470-10
C304	87-010-178-080		C-CAP,S 1000P-50 B
C305	87-010-263-080		CAP,E 100-10 SME 5X11
C306	87-010-075-080		CAP,E 10-16 5L

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C307	87-010-405-080		CAP,E 10-50 SME
C308	87-010-075-080		CAP,E 10-16 5L
C309	87-010-196-080		C-CAP,S 0.1-25 F
C501	87-010-196-080		C-CAP,S 0.1-25 F
C502	87-010-196-080		C-CAP,S 0.1-25 F
C503	87-010-196-080		C-CAP,S 0.1-25 F
C504	87-010-196-080		C-CAP,S 0.1-25 F
C505	87-010-374-080		CAP,E 47-10
C506	87-010-221-080		CAP,E 470-10
C507	87-010-384-080		CAP,E 100-25 SME
C508	87-010-075-080		CAP,E 10-16 5L
C509	87-010-075-080		CAP,E 10-16 5L
C510	87-010-197-080		C-CAP,S 0.01-25 B
C511	87-012-154-080		C-CAP,S 150P-50 CH
C512	87-012-154-080		C-CAP,S 150P-50 CH
C513	87-010-321-080		C-CAP,S 82P-50 CH
C514	87-010-321-080		C-CAP,S 82P-50 CH
C515	87-012-157-080		C-CAP,S 330P-50 CH
C516	87-012-157-080		C-CAP,S 330P-50 CH
C517	87-010-316-080		C-CAP,S 33P-50 CH
C518	87-010-316-080		C-CAP,S 33P-50 CH
C519	87-010-316-080		C-CAP,S 33P-50 CH
C521	87-010-178-080		C-CAP,S 1000P-50 B
C522	87-010-178-080		C-CAP,S 1000P-50 B
C529	87-012-154-080		C-CAP,S 150P-50 CH
C530	87-012-154-080		C-CAP,S 150P-50 CH
FL601	82-NV1-626-010		FL,8-ST-15G
J501	81-VP1-634-010		JACK,PIN 3P
J502	81-VP1-634-010		JACK,PIN 3P
J503	81-VP1-635-010		JACK,PIN 3P EARTH
L1	87-003-102-080		COIL,10UH
L101	87-003-102-080		COIL,10UH
L201	87-003-102-080		COIL,10UH
L202	87-003-143-080		COIL,4.7UH
L203	87-003-143-080		COIL,4.7UH
L501	87-008-474-080		F-BEAD,EMI BL02RN1
L502	87-003-102-080		COIL,10UH
L503	87-003-102-080		COIL,10UH
L504	87-003-102-080		COIL,10UH
M401	87-045-305-010		MOT,RF-500TB
R25	87-022-396-080		C-RES,S 3.6K-1/10WF
R33	87-022-214-080		C-RES,S 100K-1/10WF
R34	87-022-214-080		C-RES,S 100K-1/10WF
SFR1	87-024-173-080		SFR,22K DIA6 V
SFR2	87-024-173-080		SFR,22K DIA6 V
SFR3	87-024-173-080		SFR,22K DIA6 V
SFR4	87-024-168-080		SFR,1K DIA6 V
VR501	81-MX4-636-010		VR,50KBX2 RK14K12AO
X101	87-030-270-080		VIB,XTAL 16.9344MHZ
X201	87-008-394-080		CF CST 4.19 MGW

DECK C.B

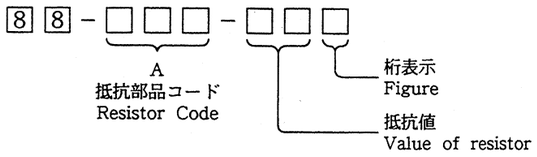
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C101	87-012-158-080		C-CAP,S 390P-50 CH
C102	87-012-158-080		C-CAP,S 390P-50 CH
C103	87-010-318-080		C-CAP,S 47P-50 CH
C104	87-010-318-080		C-CAP,S 47P-50 CH
C105	87-010-426-080		C-CAP,S 0.012-25 B
C106	87-010-426-080		C-CAP,S 0.012-25 B
C109	87-012-154-080		C-CAP,S 150P-50 CH
C110	87-012-154-080		C-CAP,S 150P-50 CH
C111	87-010-404-080		CAP,E 4.7-50 SME
C112	87-010-404-080		CAP,E 4.7-50 SME
C113	87-010-404-080		CAP,E 4.7-50 SME
C114	87-010-404-080		CAP,E 4.7-50 SME
C115	87-010-101-080		CAP,E 220-16 SME
C116	87-010-197-080		C-CAP,S 0.01-25 B
C117	87-015-819-080		C-CAP 0.01
C201	87-012-158-080		C-CAP,S 390P-50 CH
C202	87-012-158-080		C-CAP,S 390P-50 CH
C203	87-010-318-080		C-CAP,S 47P-50 CH
C204	87-010-318-080		C-CAP,S 47P-50 CH
C205	87-010-426-080		C-CAP,S 0.012-25 B
C206	87-010-426-080		C-CAP,S 0.012-25 B
C207	87-012-156-080		C-CAP,S 220P-50 CH
C208	87-012-156-080		C-CAP,S 220P-50 CH
C211	87-010-404-080		CAP,E 4.7-50 SME
C212	87-010-404-080		CAP,E 4.7-50 SME
C213	87-010-101-080		CAP,E 220-16 SME
C214	87-010-197-080		C-CAP,S 0.01-25 B
C215	87-010-197-080		C-CAP,S 0.01-25 B
C216	87-018-209-080		CAP,TC-U 0.1-50 F<Y>
C217	87-018-209-080		CAP,TC-U 0.1-50 F<Y>
C301	87-010-322-080		C-CAP,S 100P-50 CH
C302	87-010-322-080		C-CAP,S 100P-50 CH
C303	87-010-183-080		C-CAP,S 2700P-50 B
C304	87-010-183-080		C-CAP,S 2700P-50 B
C305	87-010-404-080		CAP,E 4.7-50 SME
C306	87-010-404-080		CAP,E 4.7-50 SME
C323	87-012-157-080		C-CAP,S 330P-50 CH
C324	87-012-157-080		C-CAP,S 330P-50 CH
C401	87-012-156-080		C-CAP,S 220P-50 CH
C402	87-012-156-080		C-CAP,S 220P-50 CH
C403	87-014-071-080		CAP,PP 3900P-100 J
C405	87-010-263-080		CAP,E 100-10 SME 5X11
C409	87-010-402-080		CAP,E 2.2-50 SME
C410	87-010-405-080		CAP,E 10-50 SME
C451	87-010-178-080		C-CAP,S 1000P-50 B
C453	87-010-322-080		C-CAP,S 100P-50 CH
C454	87-010-322-080		C-CAP,S 100P-50 CH
C455	87-010-197-080		C-CAP,S 0.01-25 B
C456	87-010-197-080		C-CAP,S 0.01-25 B
C501	87-012-158-080		C-CAP,S 390P-50 CH
C502	87-012-158-080		C-CAP,S 390P-50 CH
C503	87-010-182-080		C-CAP,S 2200P-50 B
C504	87-010-182-080		C-CAP,S 2200P-50 B
C505	87-010-404-080		CAP,E 4.7-50 SME
C506	87-010-404-080		CAP,E 4.7-50 SME
C507	87-010-182-080		C-CAP,S 2200P-50 B
C508	87-010-182-080		C-CAP,S 2200P-50 B
C509	87-010-182-080		C-CAP,S 2200P-50 B
C510	87-010-182-080		C-CAP,S 2200P-50 B
C511	87-010-825-080		CAP,E 0.56/50V,SME
C512	87-010-825-080		CAP,E 0.56/50V,SME
C513	87-010-546-080		CAP,E 0.33-50 SME
C514	87-010-546-080		CAP,E 0.33-50 SME
C515	87-010-404-080		CAP,E 4.7-50 SME
C516	87-010-404-080		CAP,E 4.7-50 SME
C517	87-010-371-080		CAP,E 470-6.3
C518	87-010-101-080		CAP,E 220-16 SME
C519	87-010-404-080		CAP,E 4.7-50 SME
C520	87-010-404-080		CAP,E 4.7-50 SME
C521	87-010-179-080		C-CAP,S 1200P-50 B
C522	87-010-179-080		C-CAP,S 1200P-50 B
C523	87-010-382-080		CAP,E 22-25 SME
C601	87-010-178-080		C-CAP,S 1000P-50 B
C602	87-010-186-080		C-CAP,S 4700P-50 B
C603	87-010-149-080		C-CAP,S 5P-50 CH
C604	87-010-182-080		C-CAP,S 2200P-50 B
C605	87-010-149-080		C-CAP,S 5P-50 CH
C606	87-012-154-080		C-CAP,S 150P-50 CH
C607	87-010-400-080		CAP,E 0.47-50 SME
C608	87-010-382-080		CAP,E 22-25 SME
C609	87-010-374-080		CAP,E 47-10
C801	87-010-404-080		CAP,E 4.7-50 SME
C802	87-010-381-080		CAP,E 330-16 SME
C803	87-010-101-080		CAP,E 220-16 SME
C804	87-010-237-080		CAP,E 1000-16
C805	87-010-198-080		C-CAP,S 0.022-25 B
C902	87-010-405-080		CAP,E 10-50 SME
L301	87-005-525-080		COIL,22MH-J

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
L302	87-005-525-080		COIL,22MH-J
L303	87-003-131-080		COIL,10MH J
L304	87-003-131-080		COIL,10MH J
L305	87-003-123-080		COIL,2.2MH J
L306	87-003-123-080		COIL,2.2MH J
L401	80-VW1-605-110		COIL,OSC BIAS 108K
L801	87-005-474-080		COIL,12UH J FLR50
R913	87-025-470-080		RES,NF3.3-1/4W J
SFR101	87-024-349-080		SFR,1K DIA6 H
SFR102	87-024-349-080		SFR,1K DIA6 H
SFR201	87-024-349-080		SFR,1K DIA6 H
SFR202	87-024-349-080		SFR,1K DIA6 H
SFR301	87-024-352-080		SFR,4.7K DIA6 H
SFR302	87-024-352-080		SFR,4.7K DIA6 H
SFR401	87-024-356-080		SFR,47K DIA6 H
SFR402	87-024-356-080		SFR,47K DIA6 H
DECK-1 C.B			
SOL1	82-ZM1-618-010		SOL ASSY,27
SW4	87-036-110-010		SW,PUSH SPPB 62
SW5	87-036-110-010		SW,PUSH SPPB 62
SW6	87-036-110-010		SW,PUSH SPPB 62
DECK-2 C.B			
SFR1	87-024-170-080		SFR,3.3K DIA 6V
SOL1	82-ZM1-618-010		SOL ASSY,27
SW1	87-036-110-010		SW,PUSH SPBB 62
SW2	87-036-110-010		SW,PUSH SPBB 62
SW3	87-036-110-010		SW,PUSH SPBB 62
SW4	87-036-110-010		SW,PUSH SPBB 62
SW5	87-036-110-010		SW,PUSH SPBB 62
RELAY-1 C.B			
RELAY-2 C.B			
MOTOR C.B			
M701	9X-262-513-210		SLED MOTOR ASSY
M702	9X-262-513-210		SLED MOTOR ASSY
PIN703	91-564-722-110		CONNCTOR 6P
SW701	91-572-085-110		LEAF SW
D-MO C.B			
C215	87-010-196-080		C-CAP,S 0.1-25 F
M402	87-045-305-010		MOT,RF-500TB
SW OPEN C.B			
SW402	87-036-271-010		SW,LVR 1-2-2 (*)
SW-CLOSE C.B			
SW403	87-036-109-010		SW,PUSH SPPB 61
SW U/D C.B			
SW401	87-036-271-010		SW,LVR 1-2-2 (*)
PHOTO C.B			
PH401	87-026-573-010		P-SNSR GP1S53V (*)

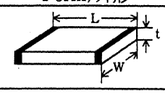
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
KEY-1 C.B			
D601	87-001-123-080		LED,SLZ 981C-02TI
D602	87-017-369-080		LED,SEL2510C TP-6
D603	87-017-369-080		LED,SEL2510C TP-6
D604	87-017-369-080		LED,SEL2510C TP-6
D605	87-017-369-080		LED,SEL2510C TP-6
D606	87-017-369-080		LED,SEL2510C TP-6
D607	87-017-369-080		LED,SEL2510C TP-6
SW501	87-036-215-080		SW,TACT EVQ21404M
SW502	87-036-215-080		SW,TACT EVQ21404M
SW503	87-036-215-080		SW,TACT EVQ21404M
SW504	87-036-215-080		SW,TACT EVQ21404M
SW505	87-036-215-080		SW,TACT EVQ21404M
SW506	87-036-215-080		SW,TACT EVQ21404M
SW507	87-036-215-080		SW,TACT EVQ21404M
SW508	87-036-215-080		SW,TACT EVQ21404M
SW509	87-036-215-080		SW,TACT EVQ21404M
SW510	87-036-215-080		SW,TACT EVQ21404M
SW511	87-036-215-080		SW,TACT EVQ21404M
KEY-2 C.B			
D608	87-017-369-080		LED,SEL2510C TP-6
D609	87-017-369-080		LED,SEL2510C TP-6
D610	87-017-369-080		LED,SEL2510C TP-6
D611	87-017-369-080		LED,SEL2510C TP-6
SW512	87-036-215-080		SW,TACT EVQ21404M
SW513	87-036-215-080		SW,TACT EVQ21404M
SW514	87-036-215-080		SW,TACT EVQ21404M
SW515	87-036-215-080		SW,TACT EVQ21404M
SW516	87-036-215-080		SW,TACT EVQ21404M
SW517	87-036-215-080		SW,TACT EVQ21404M
KEY-3 C.B			
SW518	87-036-215-080		SW,TACT EVQ21404M
SW519	87-036-215-080		SW,TACT EVQ21404M
SW520	87-036-215-080		SW,TACT EVQ21404M
SW521	87-036-215-080		SW,TACT EVQ21404M
SW522	87-036-215-080		SW,TACT EVQ21404M
LED-1 C.B			
D615	87-017-369-080		LED,SEL2510C TP-6
D616	87-017-369-080		LED,SEL2510C TP-6
LED-2 C.B			
D617	87-017-369-080		LED,SEL2510C TP-6
D618	87-017-369-080		LED,SEL2510C TP-6
LED-3 C.B			
D612	87-017-369-080		LED,SEL2510C TP-6
D613	87-017-369-080		LED,SEL2510C TP-6
D614	87-017-369-080		LED,SEL2510C TP-6
D619	87-020-109-010		LED,SLF-201C
D620	87-020-109-010		LED,SLF-201C
VOL C.B			
VR502	82-SP1-607-019		VR, 50KAX2 SQ14

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

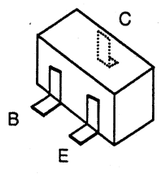
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



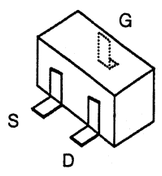
チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions／寸法 (mm) Form/外形	L	W	t	Resistor Code : A 抵抗コード : A
1/32W	1608	±5%	CJ		1.6	0.8	0.35	108
1/10W	2125	±5%	CJ		2	1.25	1.45	118
1/8W	3126	±5%	CJ		3.2	1.6	0.5 ~0.7	128

TRANSISTOR ILLUSTRATION



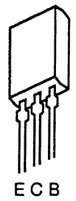
DTA114TK
DTA124EK
DTC123JK
DTC144EK/WK
2SA1236GR
2SC2712GR
2SC3326B



2SK368GR

2SA952K
2SC2001K
2SC3331TU
2SC1815GR

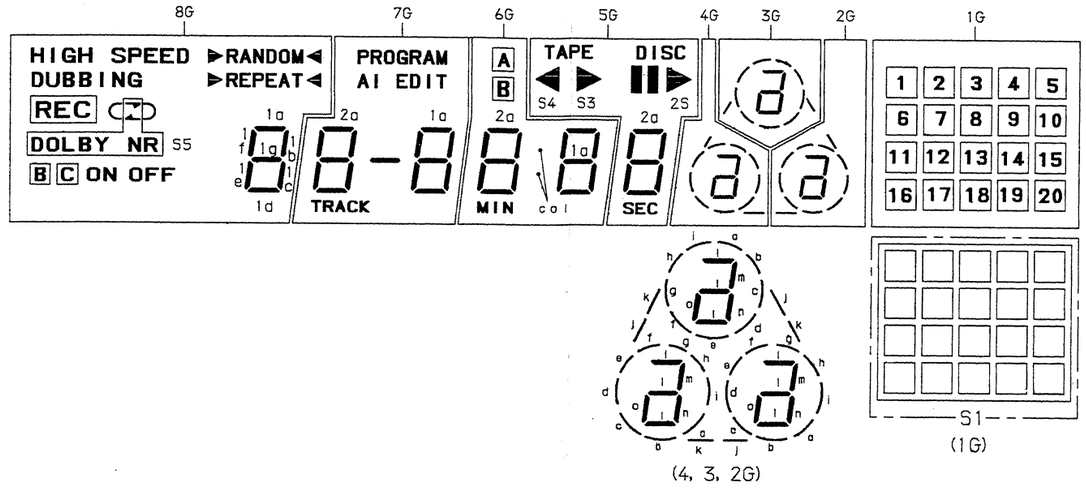
2SB1370E



2SA933S

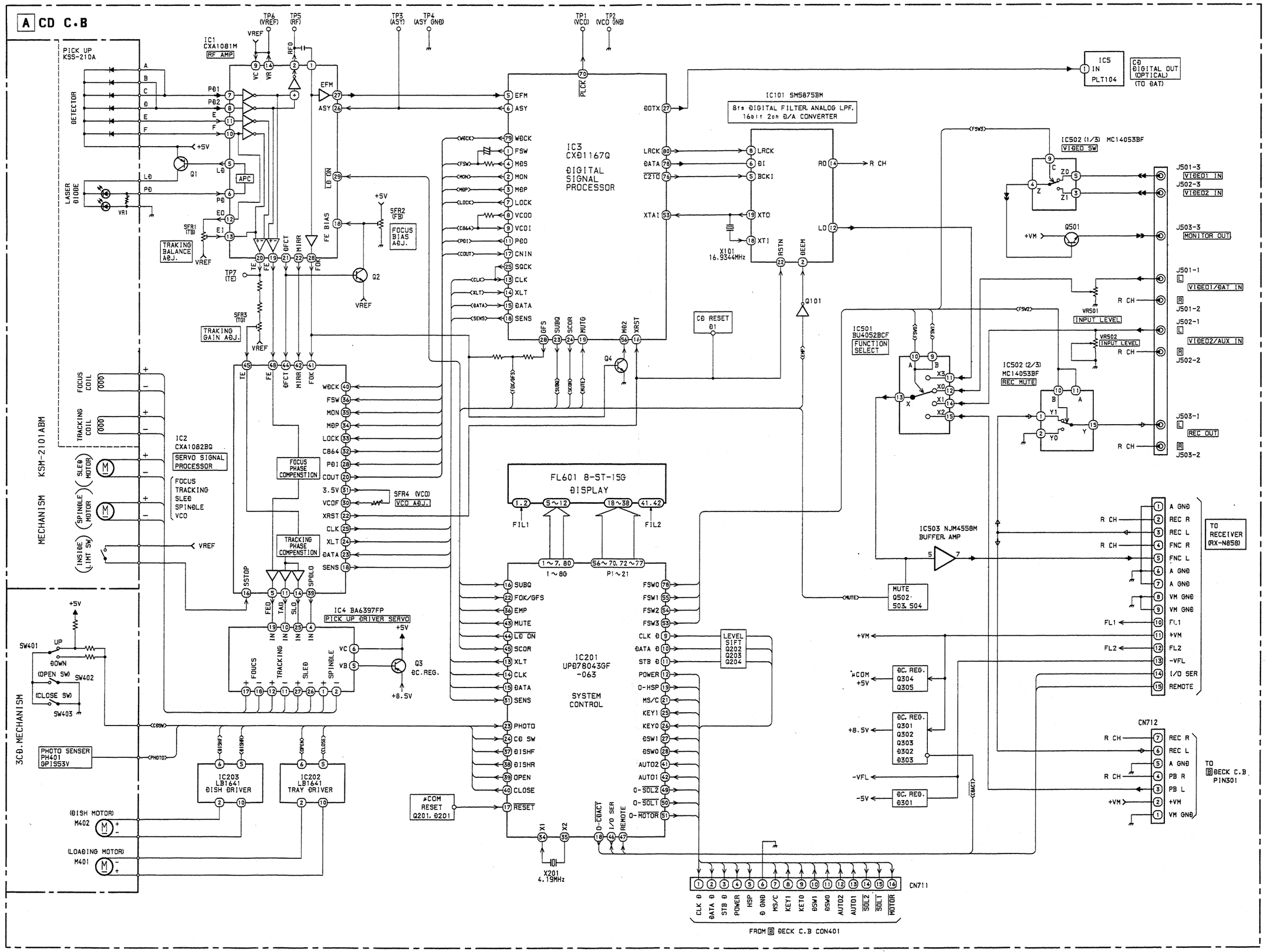
FL GRID ASSIGNMENT

FL, 8-ST-15G

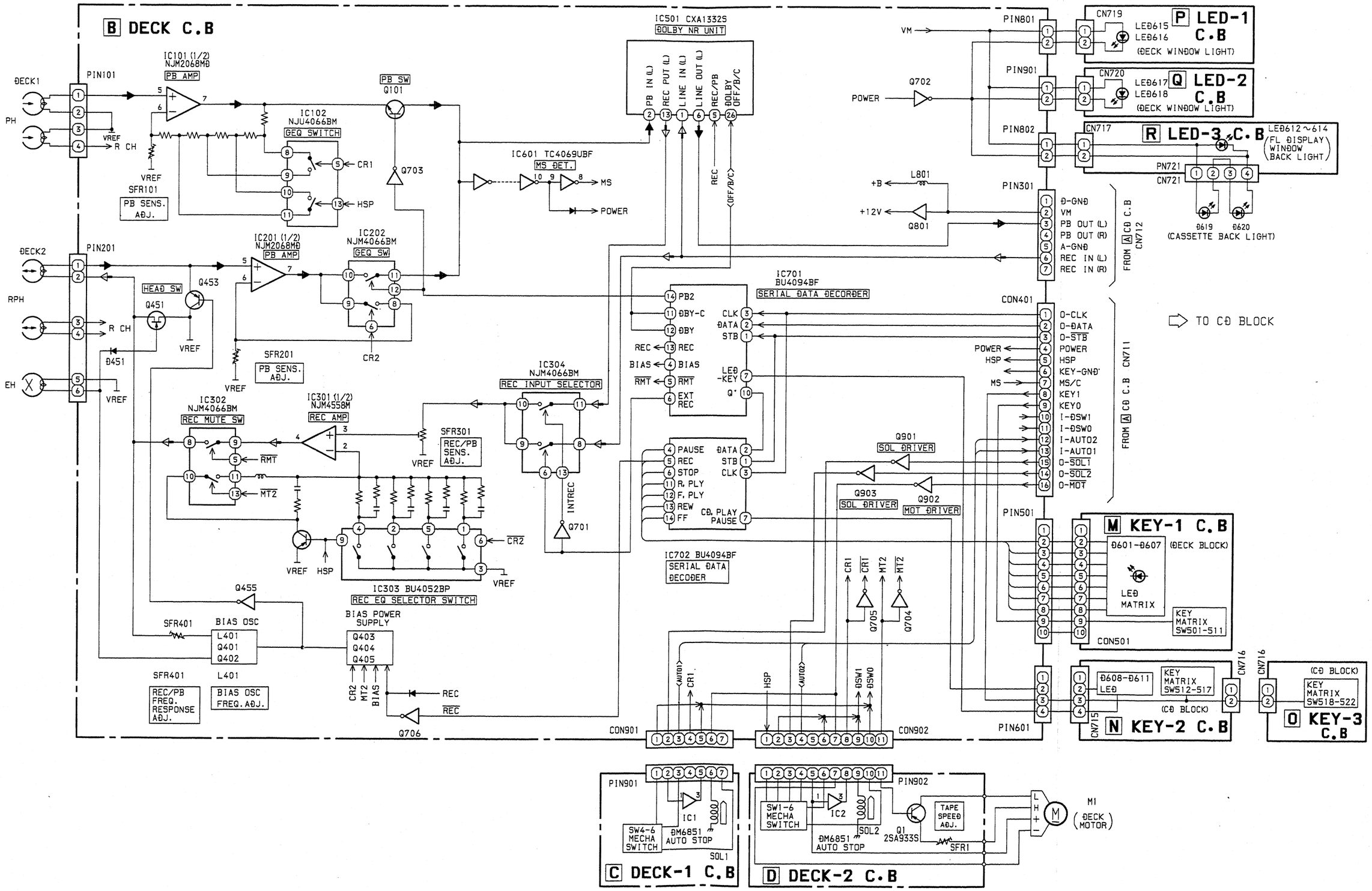


ANODE CONNECTION

	8G	7G	6G	5G	4G	3G	2G	1G
P1	1a	1a	1a	**TAPE**	j.	k	k	**1**
P2	1b	1b	1b	**DISC**	f	g	g	**2**
P3	1c	1c	1c	▮▮	l	o	m	**5**
P4	1d	1d	1d	–	m	m	l	**7**
P5	1e	1e	1e	S2	o	l	n	**6**
P6	1f	1f	1f	S4	e	h	h	**3**
P7	1g	1g	1g	S3	g	f	f	**4**
P8	▶(RANDOM)◀	—	col	–	n	n	a	**8**
P9	**RANDOM**	2a	2a	2a	d	i	e	**9**
P10	▶(REPEAT)◀	2b	2b	2b	c	a	i	**10**
P11	**DUBBING**	2c	2c	2c	i	c	b	**13**
P12	☽	2d	2d	2d	k	d	j	**15**
P13	**REC**	2e	2e	2e	a	e	a	**14**
P14	**REPEAT**	2f	2f	2f	h	b	d	**11**
P15	**HIGH SPEED**	2g	2g	2g	b	j	c	**12**
P16	☾	**TRACK**	**MIN**	**SEC**	–	–	–	**16**
P17	S5	**AI**	**B**	–	–	–	–	**17**
P18	**OFF**	**EDIT**	**A**	–	–	–	–	**18**
P19	**ON**	**PROGRAM**	–	–	–	–	–	**19**
P20	**C**	–	–	–	–	–	–	**20**
P21	**B**	–	–	–	–	–	–	S1

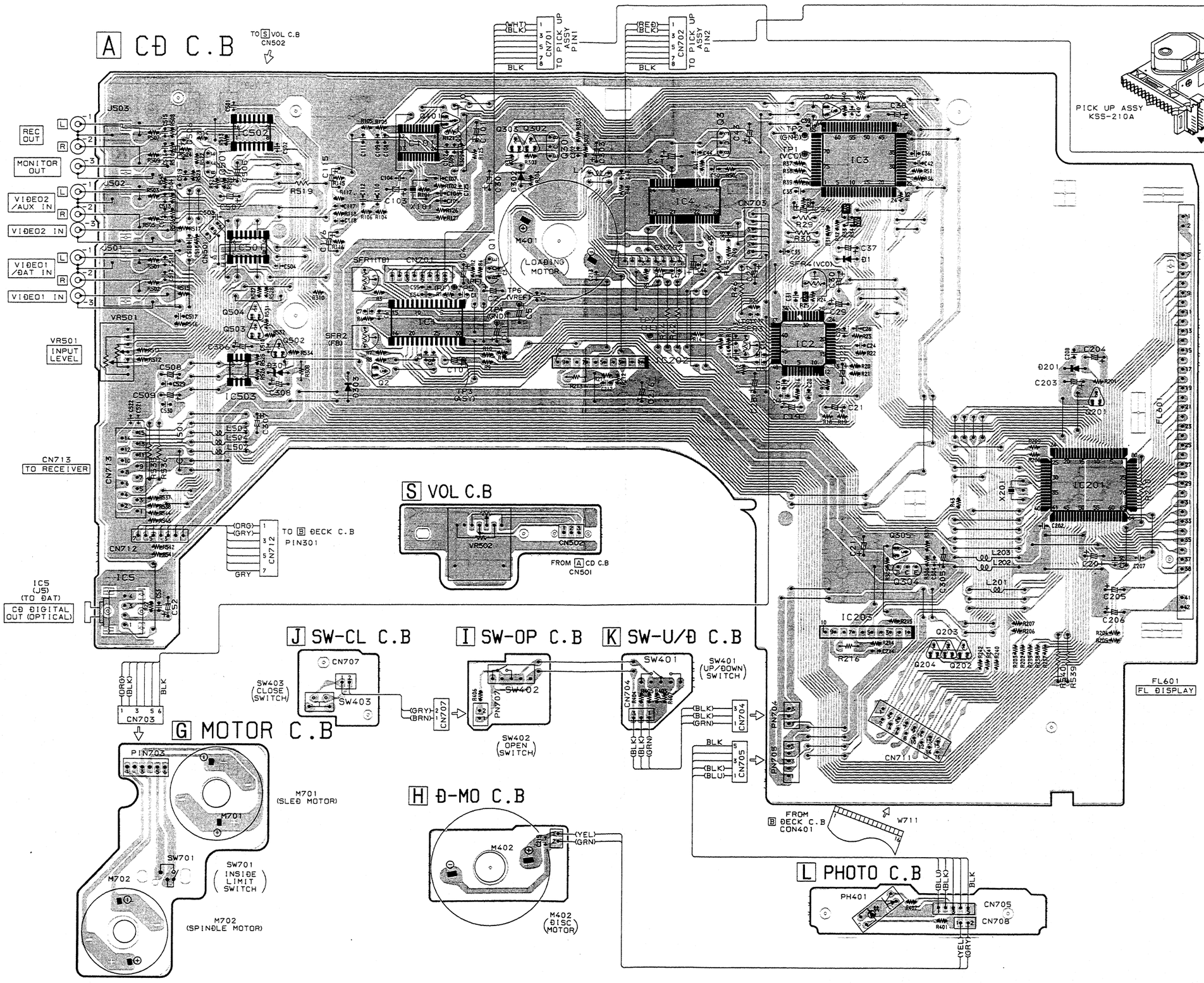

A CD C.B
MECHANISM KSM-2101ABM
3CD. MECHANISM
PICK UP KSS-210A
DETECTOR
LASER DIODE
IC1 CXA1081M RF AMP
IC2 CXA1082BQ SERVO SIGNAL PROCESSOR
IC3 CXD1167Q DIGITAL SIGNAL PROCESSOR
IC4 BA6397FP PICK UP DRIVER SERVO
IC101 SM5875BM 8fs DIGITAL FILTER, ANALOG LPF, 16bit 2ch D/A CONVERTER
IC201 UPD78043GF -063 SYSTEM CONTROL
IC203 LB1641 DISH DRIVER
IC202 LB1641 TRAY DRIVER
IC501 BU4052BCF FUNCTION SELECT
IC502 (1/3) MC14053BF VIDEO SW
IC502 (2/3) MC14053BF REC MUTE
IC503 NJM4558M BUFFER AMP
FL601 8-ST-15G DISPLAY
CD DIGITAL OUT (OPTICAL) (TO DAT)
IC5 IN PLT104
TRAKING BALANCE ADJ.
TRAKING GAIN ADJ.
FOCUS BIAS ADJ.
FOCUS PHASE COMPENSTION
TRACKING PHASE COMPENSTION
SFR4 (VCO) VCO ADJ.
CD RESET
MUTE Q502, 503, 504
INPUT LEVEL
REC OUT
MONITOR OUT
TO RECEIVER (RX-N858)
TO DECK C.B PIN301
FROM DECK C.B CON401
CN711
CN712
X101 16.9344MHz
X201 4.19MHz
FOCUS COIL
TRACKING COIL
SLED MOTOR
SPINDLE MOTOR
INSIDE LIMT SW
LOADING MOTOR M401
DISH MOTOR M402
PHOTO SENSER PH401 GP1S53V
SW401 SW402 SW403

BLOCK DIAGRAM-2 (DECK)

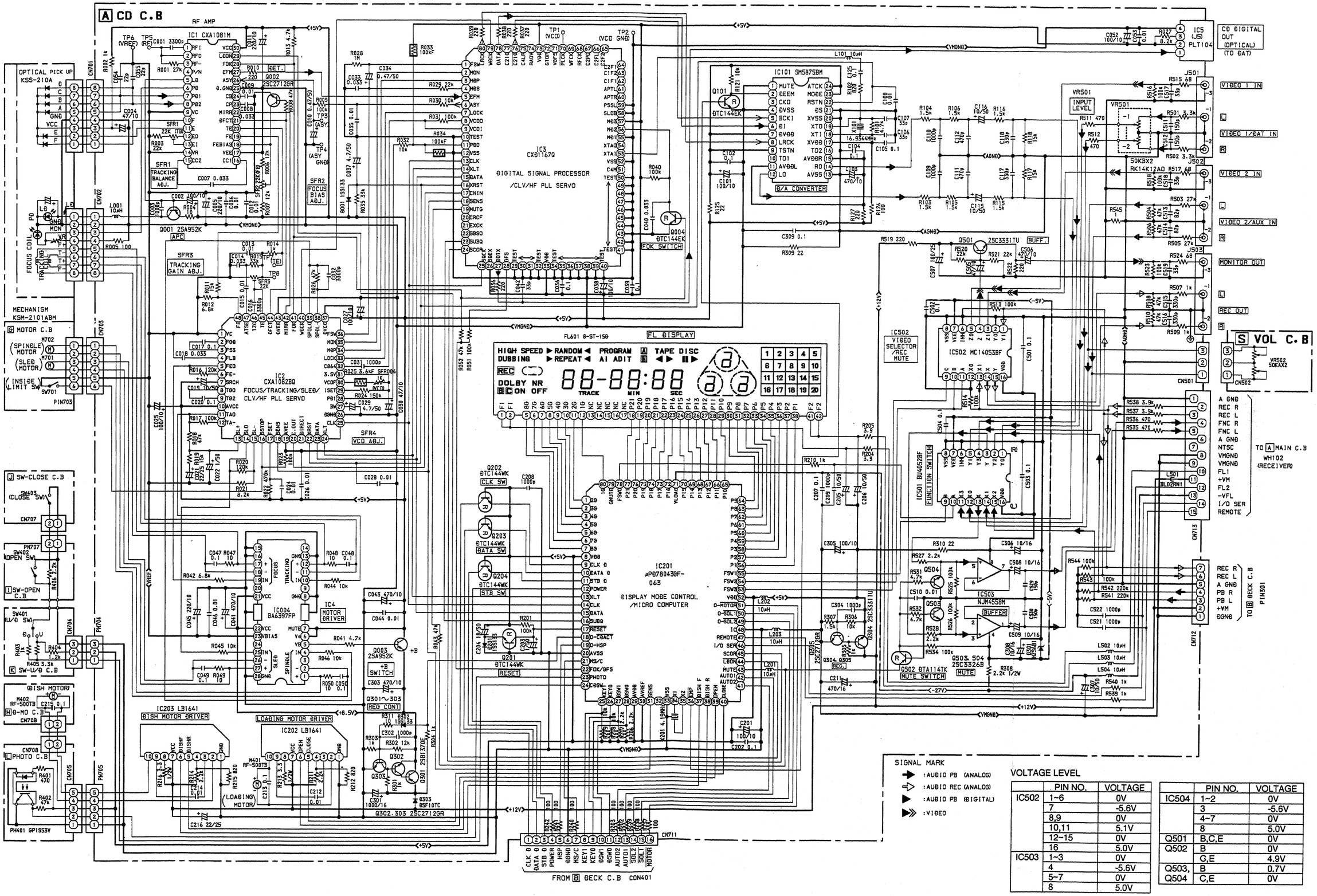


1 2 3 4 5 6 7 8 9 10 11 12 13 14

A B C D E F G H I J



SCHEMATIC DIAGRAM-1 (CD)



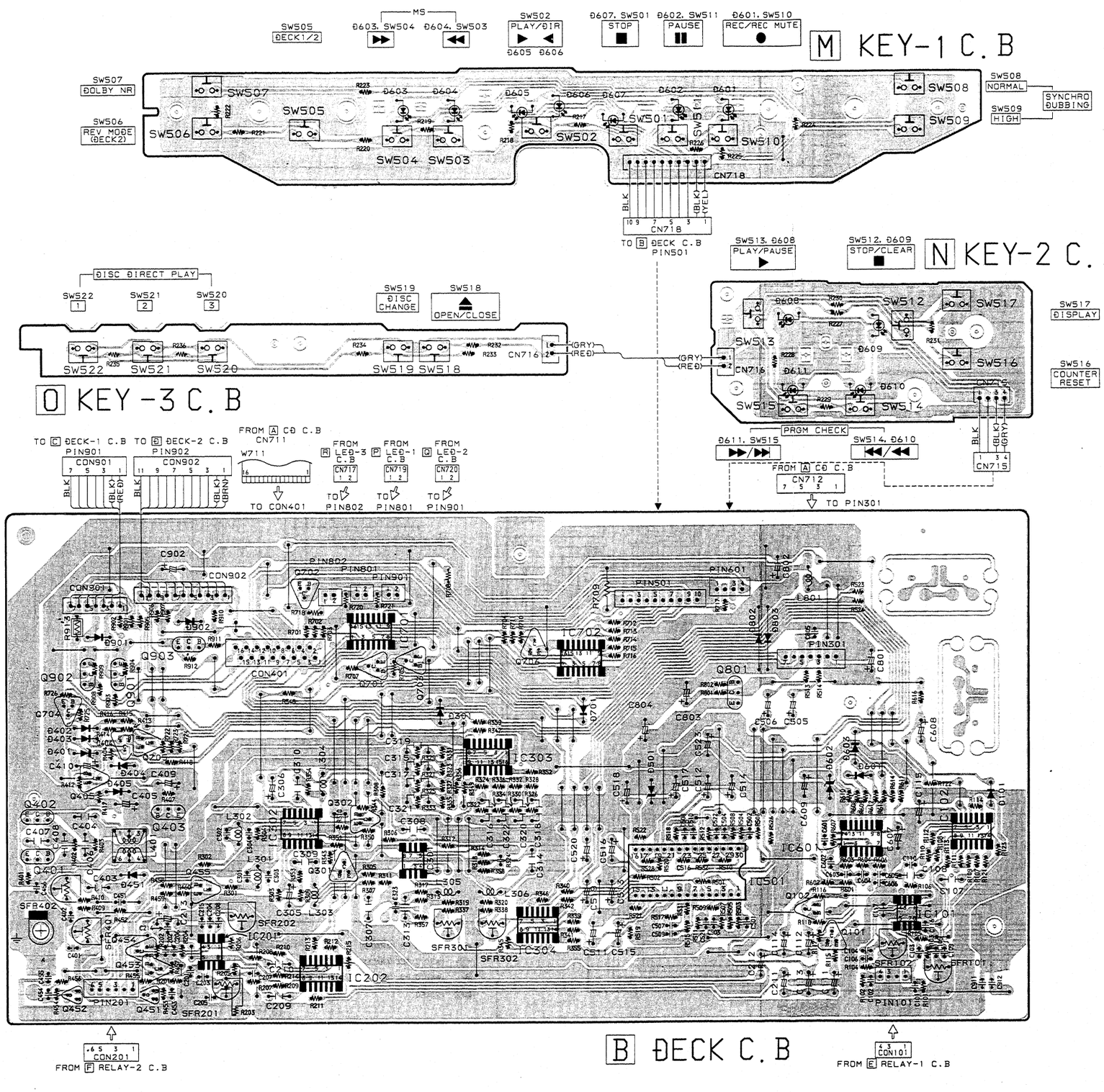
VOLTAGE LEVEL

	PIN NO.	VOLTAGE
IC502	1~6	0V
	7	-5.6V
	8,9	0V
	10,11	5.1V
	12~15	0V
	16	5.0V
IC503	1~3	0V
	4	-5.6V
	5~7	0V
	8	5.0V

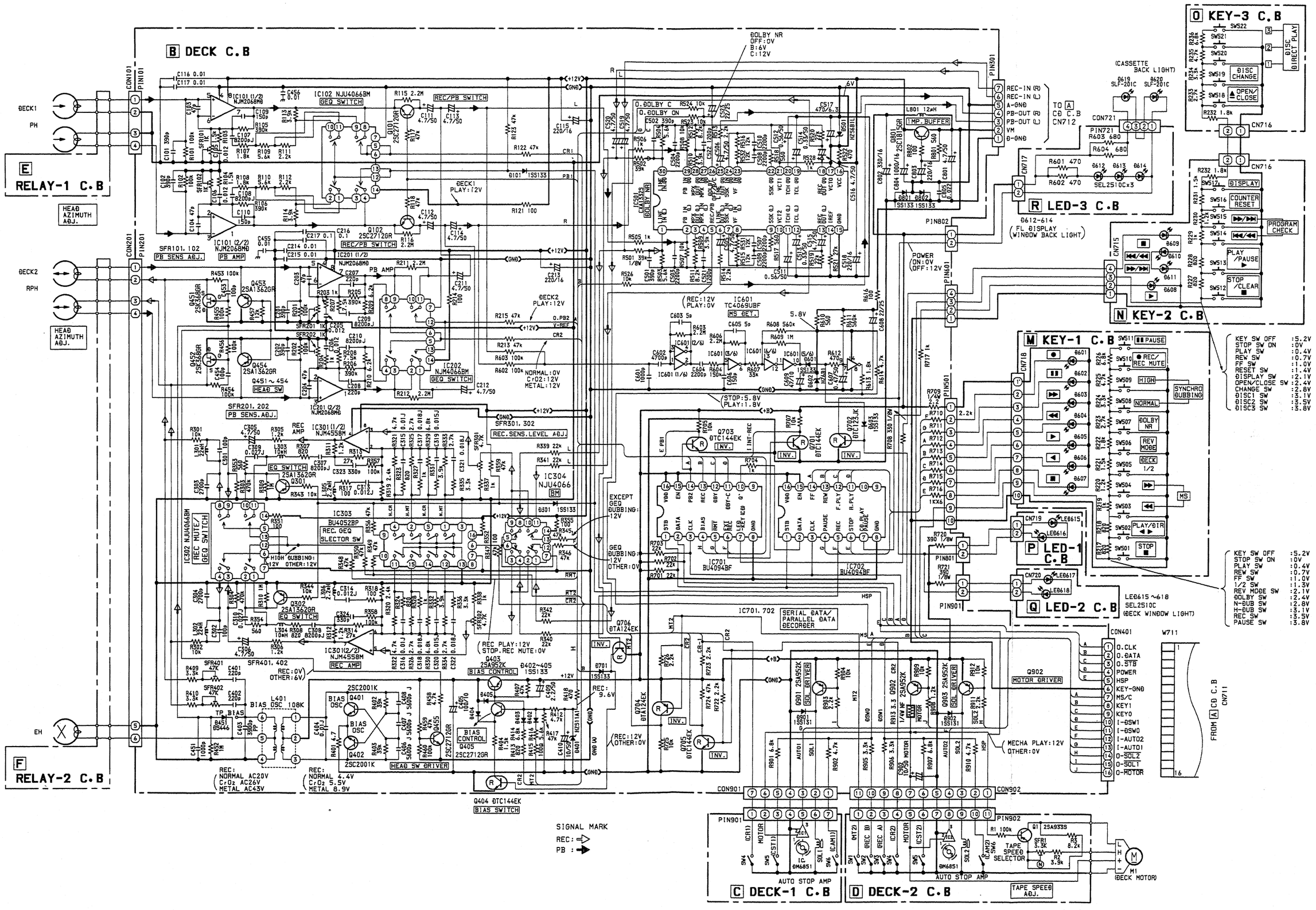
	PIN NO.	VOLTAGE
IC504	1~2	0V
	3	-5.6V
	4~7	0V
	8	5.0V
Q501	B,C,E	0V
Q502	B	0V
	C,E	4.9V
Q503, Q504	B	0.7V
	C,E	0V

1 2 3 4 5 6 7 8 9 10 11 12 13 14

A B C D E F G H I J



SCHEMATIC DIAGRAM-2 (DECK)



IC DESCRIPTION

IC, µPD78043GF-063

Pin No.	Pin Name	I/O	Description
1~7	2G~8G	O	Digit output for FL display.
8	VDD	-	Power supply terminal. (+5V)
9	CLK D	O	Serial data output to control the output port expansion IC (4094).
10	DATA D		
11	STB D		
12	POWER	O	"H" during POWER ON of the unit.
13	XLT	O	Serial data output to control the signal processing IC for CD.
14	CLK		
15	DATA		
16	SUBQ	I	Sub-code Q input.
17	$\overline{\text{RESET}}$	I	System reset input.
18	O-$\overline{\text{CDACT}}$	O	Output to control the power of CD sircuit. "L" during CD function.
19	O-HSP	O	High speed control output to DECK. "H" during high speed dubbing.
20	AVSS	-	Ground.
21	MS/C	ADI	A/D input of MS signal and Dolby-B or B/C select detector from DECK.
22	FOK/GFS	ADI	A/D input of the focus OK signal and frame sync lock state display signal from CD.
23	PHOTO	ADI	Mechanism 3disc table position detect photo sensor signal input from CD.
24	CDSW	ADI	A/D input of mechanism tray and base unit position detect switches from CD.
25	KEY1	ADI	A/D input of key data from CD button.
26	KEY0	ADI	A/D input of key data from DECK button.
27	DSW1	ADI	A/D input of mechanism status detect switch from DECK.
28	DSW0	ADI	A/D input of mechanism status detect switch from DECK.
29	AVDD	-	Power supply terminal.
30	AVREF	I	Reference voltage. (+5V)
31	SENS	I	Internal state of CD signal processing IC.
32	-	-	-
33	VSS	-	Ground.
34	X1	I	4.19MHz clock oscillator input.
35	X2	-	4.19MHz clock oscillator input.
36	$\overline{\text{EMP}}$	O	De-emphasis control output for CD output signal. "L" when ON.
37	DISH F	O	Mechanism 3 disc table drive control output to IC203. "H" during forward rotation.
38	DISH R	O	Mechanism 3 disc table drive control output to IC203. "H" during reverse rotation.
39	OPEN	O	Mechanism tray drive control output to IC202. "H" during open.
40	CLOSE	O	Mechanism tray drive control output to IC202. "H" during open.
41	AUTO2	I	Mechanism reel table rotation detect signal input from DECK 2.
42	AUTO1	I	Mechanism reel table rotation detect signal input from DECK 1.
43	MUTE	O	Output signal to mute the signal output. "H" during muting.
44	$\overline{\text{LDON}}$	O	Output signal which controls ON/OFF of CD pickup laser diode. "L" when ON.
45	SCOR	I	CD subcode sync SO + SI input.
46	I/O SER	I/O	Serial data input/output to and from RX.
47	REMOTE	I	Remote control unit received signal from RX.

Pin No.	Pin Name	I/O	Description
48	IC	-	Internal connection. (connected to GND)
49	O-$\overline{\text{SOL2}}$	O	Mechanism solenoid drive control output to DECK 2. "L" when ON.
50	O-$\overline{\text{SOL1}}$	O	Mechanism solenoid drive control output to DECK 1. "L" when ON.
51	O-$\overline{\text{MOTOR}}$	O	Mechanism main motor drive control output to DECKs. "L" when ON.
52	VDD	-	Power supply terminal. (+5V)
53	FSW3	O	Function selector control output. (video select)
54	FSW2	O	Function selector control output. (REC MUTE)
55	FSW1	O	Function selector control output. (function B)
56~70	P1~15	O	Segment output for FL display.
71	VLOAD	-	-27V power supply for FL pull down.
72~77	P16~21	O	Segment output for FL display.
78	FSW0	O	Function selector control output. (function A)
79	GMUTE	O	Output signal to mute graphic of CDG. "H" during muting. (Not used.)
80	1G	O	Digit output for FL display.

IC, SM5875BM

Pin No.	Pin Name	I/O	Description
1	MUTE	I	When MODE is "H": Soft mute ON/OFF control. Mute is active when "H". When MODE is "L": Attenuator level direction control. The attenuator direction is down when "H".
2	DEEM	I	De-emphasis ON/HIGH. ("H"=De-emphasis)
3	CKO	O	Crystal oscillator output. (Not used)
4	DVSS	-	Digital VSS.
5	BCKI	I	Bit clock input.
6	DI	I	Serial data input.
7	DVDD	-	Digital VDD.
8	LRCK	I	Input sample data rate clock input. "H" = Lch, "L" = Rch.
9	TSTN	I	LSI test input. ("L"=TEST)
10	TO1	O	Test output 1. Normally "L". (Not used)
11	AVDDL	-	Analog VDD.
12	LO	O	Left channel analog output.
13	AVSS	-	Analog VSS.
14	RO	O	Right channel analog output.
15	AVDDR	-	Analog VDD.
16	TO2	O	Test output 2. Normally "L". (Not used)
17	XVDD	-	Crystal VDD. (+5V)
18	XTI	I	External clock input. (16.9344MHz)
19	XTO	O	Crystal oscillator output.
20	XVSS	-	Crystal VSS.
21	DS	I	Double-speed mode when "H". (Connected to +5V)
22	RSTN	I	Reset when "L".
23	MODE	I	Soft mute/attenuator mode select. Soft mute mode when "H".
24	ATCK	I	Attenuator level setting clock. Disabled when MODE is "H".

IC,CXD1167Q

Pin No.	Pin Name	I/O	Description
1	FSW	O	Time constant switching output for the spindle motor output filter.
2	MON	O	ON/OFF control output for the spindle motor.
3	MDP	O	Spindle motor drive output. Coarse control=CLV-S mode, speed control=CLV-P mode.
4	MDS	O	Spindle motor drive output, speed control in the CLV-S mode.
5	EFM	I	EFM signal input from the RF amplifier.
6	ASY	O	Output to control the slice level of the EFM signal.
7	LOCK	O	When GFS sampled by WFCK/16, H=output.When "L"serially output 8 times,L=output.
8	VCOO	O	VCO output. f=8.6436MHz when it is locked to the EFM signal.
9	VCOI	I	VCO input.
10	TEST	-	Connected to Ground.
11	PDO	O	Phase comparison output between the EFM and VCO/2 signals.
12	VSS	I	Ground.
13	CLK	I	Serial data transmission clock input from CPU.
14	XLT	I	Latch input from CPU. Latches 8-bit shift register data to each register.
15	DATA	I	Input serial data from CPU.
16	XRST	I	System reset input. "L"=reset.
17	CNIN	I	Tracking pulse input.
18	SENS	O	Internal state is output corresponding to the address.
19	MUTG	I	Muting input. When ATTM="L", MTUG="L" and normal. When "H", no sound signal.
20	CRCF	O	Result of the CRC check of sub code Q is output. (Not used)
21	EXCK	I	Clock input for sub code serial output.
22	SBSO	O	Sub code serial output.
23	SUBQ	O	Sub code Q output.
24	SCOR	O	Sub code sync SO + SI output.
25	SQCK	I/O	Sub code Q read clock.
26	SQEK	I	SQCK selection input. (Connected to +5V)
27	DOTX	O	Digital audio interface output. (WFCK is output when OFF)
28	GFS	O	Display output of the lock state of the frame sync. "H" = lock.
29~32	TEST	I/O	External RAM data terminal, DATA 8~5. (Connected to Ground)
33	VDD	O	Power supply. (+5V)
34~37	TEST	I/O	External RAM data terminal, DATA 4~1. (Connected to Ground)
38~48	TEST	O	External RAM address output, ADDR 01~11. (Connected to Ground)
49	TEST	O	Write enable signal output to the external RAM, active when "L". (Connected to Ground)
50	TEST	O	Chip select signal output to the external RAM, active when "L". (Connected to Ground)
51	C4M	O	1/2 frequency division output to the x'tal. f=4.2336MHz. (Not used)
52	VSS	-	Ground.
53	XTAI	I	X'tal oscillation circuit input. f=8.4672MHz.
54	XTAO	O	X'tal oscillation circuit output. f=8.4672MHz. (Not used)
55	MD1	I	Mode selection input 1. It is used when "L" (Clock frequency 8.4672MHz,
56	MD2		Mode selection input 2. It is used when "L" digital out OFF, digital
57	MD3		Mode selection input 3. It is used when "H" filter ON.)

Pin No.	Pin Name	I/O	Description
58	SLOB	I	Code switching input of the audio output. "L" = 2's complement output, "H" = offset binary output. (Connected to GND)
59	PSSL	I	Mode switching input of the audio data output. "L" = serial output, "H" = parallel output (Connected to GND)
60	APTR	O	Apperture compensation control output. Filter ON = 88.2kHz, filter OFF = 44.1kHz. (Not used)
61	APTL	O	Apperture compensation control output. Filter ON = 88.2kHz, filter OFF = 44.1kHz. (Not used)
62	C1F1	O	DA01 (LSB of the parallel audio data) output when PSSL = "H", C1F1 output when PSSL = "L". (Not used)
63	C1F2	O	DA02 output when PSSL = "H", C1F2 output when PSSL = "L". (Not used)
64	C2F1	O	DA03 output when PSSL = "H", C2F1 output when PSSL = "L". (Not used)
65	C2F2	O	DA04 output when PSSL = "H", C2F2 output when PSSL = "L". (Not used)
66	C2FL	O	DA05 output when PSSL = "H", C2FL output when PSSL = "L". (Not used)
67	C2P0	O	DA06 output when PSSL = "H", C2P0 output when PSSL = "L". (Not used)
68	RFCK	O	DA07 output when PSSL = "H", RFCK output when PSSL = "L". (Not used)
69	WFCK	O	DA08 output when PSSL = "H", WFCK output when PSSL = "L".
70	PLCK	O	DA09 output when PSSL = "H", PLCK output when PSSL = "L". (Note 1) (Not used)
71	VGFS	O	DA10 output when PSSL = "H", VGFS output when PSSL = "L". (Not used)
72	GTOP	O	DA11 output when PSSL = "H", GTOP output when PSSL = "L". (Not used)
73	VDD	-	Power supply. (+5V)
74	RA0V	O	DA12 output when PSSL = "H", RFCK output when PSSL = "L". (Not used)
75	C4LR	O	DA13 output when PSSL = "H", RFCK output when PSSL = "L". (Not used)
76	$\overline{C210}$	O	DA14 output when PSSL = "H", RFCK output when PSSL = "L". (Not used)
77	C210	O	DA15 output when PSSL = "H", RFCK output when PSSL = "L". (Note 2) (Not used)
78	DATA	O	DA16 (MSB of the parallel audio data) output when PSSL = "H", RFCK output when PSSL = "L". (Note 3) (Not used)
79	WDCK	O	Strobe signal putput. 176.4kHz when filter ON, 88.2kHz when filter OFF. (Not used)
80	LRCK	O	Strobe signal putput. 188.2kHz when filter ON, 44.1kHz when filter OFF.

Note 1 : PLCK : VCO/2 output. f=4.3218MHz when EFM signal is locked.
Note 2 : C210 : Bit clock output. f=2.1168MHz
Note 3 : DATA: Serial data output of the audio signal.

IC, CXA1081M

Pin No.	Pin Name	I/O	Description
1	RFI	I	RF summing amplifier output is input combined with C.
2	RFO	O	RF summing amplifier output, EYE pattern test point.
3	RF ⊖	I	RF summing invertion input.
4	P/N	I	Input is switched with the polarity of the laser diode. (Not used)
5	LD	I	Control output of the laser diode output.
6	PD	I	Photo detector for detecting the laser diode output is connected.
7	PD1	I	RF I-V amplifier (1) inversion input.
8	PD2	I	RF I-V amplifier (2) inversion input.
9	VC	I	Reference voltage input of the internal IC.
10	F	I	F I-V amplifier inversion input.
11	E	I	E I-V amplifier inversion input.
12	EO	O	E I-V amplifier output.
13	EI	I	E I-V amplifier gain adjustment terminal.
14	VR	O	Intermediate potential is output.
15	CC2	O	Defect bottom hold (1) capacitor connection terminal.
16	CC1	I	Defect bottom hold (1) capacitor connection terminal.
17	VEE	-	GND in the single power mode. Negative power in the ±2 power mode.
18	FE BIAS	I	Positive phase bias input of the focus error amplifier.
19	FE	O	Focus error amplifier output.
20	TE	O	Tracking error amplifier output.
21	DEFECT	O	Defect detection output. Mirror defect detection signal is output.
22	MIRR	O	Mirror comparator output.
23	CP	O	Mirror hold capacitor connection terminal.
24	CB	O	Defect bottom hold (2) capacitor connection terminal.
25	D GND	-	Digital GND.
26	ASY	I	Auto symmetry control input.
27	EFM	O	EFM output comparator output.
28	FOK	O	Focus OK output.
29	LD ON	I	Laser diode ON/OFF control input.
30	VCC	-	Positive power supply. (+5V)

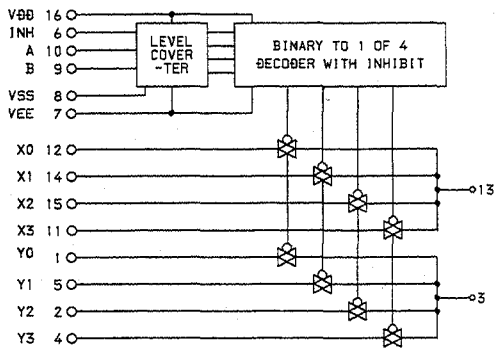
IC, CXA1082BQ

Pin No.	Pin Name	I/O	Description
1	VC	-	Connected to VREF.
2	FGD	O	When the high frequency gain of the focus servo is lowered, a capacitor is connected between this terminal and pin 3.
3	FS3	I	The high frequency gain of the focus servo is switched with ON/OFF of FS3.
4	FLB	O	Time constant external terminal for raising the low-frequency range of the focus servo.
5	FEO	O	Focus error signal output terminal.
6	FE ⊖	I	Focus amplifier inversion input terminal.
7	SRCH	O	Time constant exterminator terminal to generate the focus search waveform.
8	TG0	O	Time constant external terminal for switching the tracking high-frequency gain.
9	TG2	O	Time constant external terminal for switching the tracking high-frequency gain.
10	AVCC	-	Power supply terminal. (+5V)
11	TAO	O	Tracking error signal output terminal.
12	TA ⊖	I	Tracking amplifier inversion input terminal.
13	SL ⊕	I	Non-inversion input terminal of the sled amplifier.
14	SLO	O	Output terminal of the sled amplifier.
15	SL ⊖	I	Inversion input terminal of the sled amplifier.
16	SSTOP	I	ON/OFF detection signal terminal of limit switch detects the inner-most circumference.
17	FSET	I	Setting terminal of the phase compensation peak of the focus tracking and CLV LPF.
18	SENS	O	IC internal state is output corresponding to the address.
19	AVEE	-	Power supply terminal.
20	C. OUT	O	Count signal output of the tracking in the high-speed access mode.
21	DIRECT	O	It is used when the one-track jump. It is normally set to "H". A direction of the tracking jump pulse is inverted when "L". It is set in a time to "L" at the start and fall of TZC. (Not used)
22	XRST	O	All the internal register are cleared when "L".
23	DATA	I	Serial data transmission from the CPU.
24	XLT	O	Data of the internal serial shift register is transmitted to each latch memory which the address is decoded when "L".
25	CLK	O	Data transmission clock. Data is read at the falling edge.
26	DGND	-	Ground.
27	BW	I	Time constant external terminal of the loop filter.
28	PD1	I	Input terminal of data PD0 output from phase comparator CXD1167Q.
29	ISET	I	The current which set the height of focus search, tracking jump and sled kick is supplied.
30	VCOF	I	The free running frequency of VCO corresponds to the resist value between pin 30 and pin 31.
31	3.5V	O	
32	C864	O	8.64MHz VCO output terminal.
33	LOCK	I	Connected to the LOCK terminal of CXD1167Q.
34	MDP	I	Terminal to connect the MDP terminal of CXD1167Q.
35	MON	I	Terminal to connect the MON terminal of CXD1167Q.
36	FSW	I	LPF time constant external terminal of the CLV servo difference signal.
37	DVCC	-	Power supply terminal. (+5V)

Pin No.	Pin Name	I/O	Description
38	SPDL ⊖	I	Inversion terminal of the spindle drive amplifier.
39	SPDLO	O	Spindle motor drive terminal.
40	WDCK	I	Word clock signal input terminal.
41	FOK	I	Focus OK signal input terminal.
42	MIRR	I	Mirror signal input terminal.
43	DVEE	-	Ground.
44	DFCT	I	Focus servo and tracking servo are OFF while "H" is being inputting.
45	TE	I	Tracking servo signal input terminal.
46	TZC	I	Input terminal of the tracking zero-cross comparator.
47	ATSC	I	ATSC detection window comparator input terminal. Data input terminal to indicate that a mechanical shock is occurred.
48	FE	I	Focus error signal input terminal.

IC BLOCK DIAGRAM

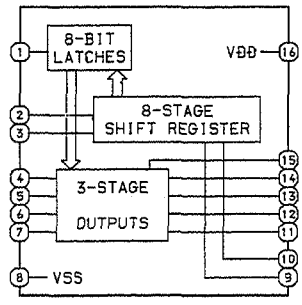
IC, BU4052BCF



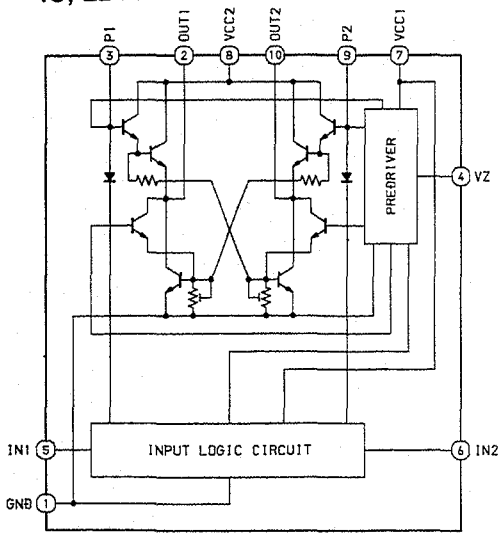
TRUTH TABLE

INHIBIT	A	B	ON SWITCH
L	L	L	X0 Y0
L	H	L	X1 Y1
L	L	H	X2 Y2
L	H	H	X3 Y3
H	X	X	NONE

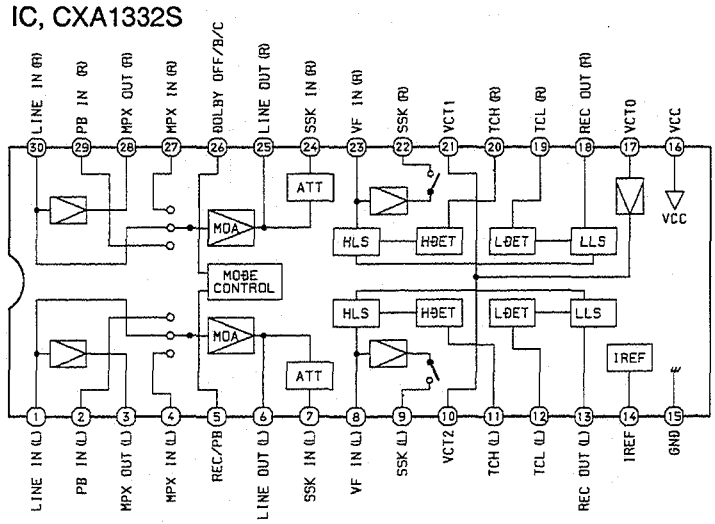
IC, BU4094BCF

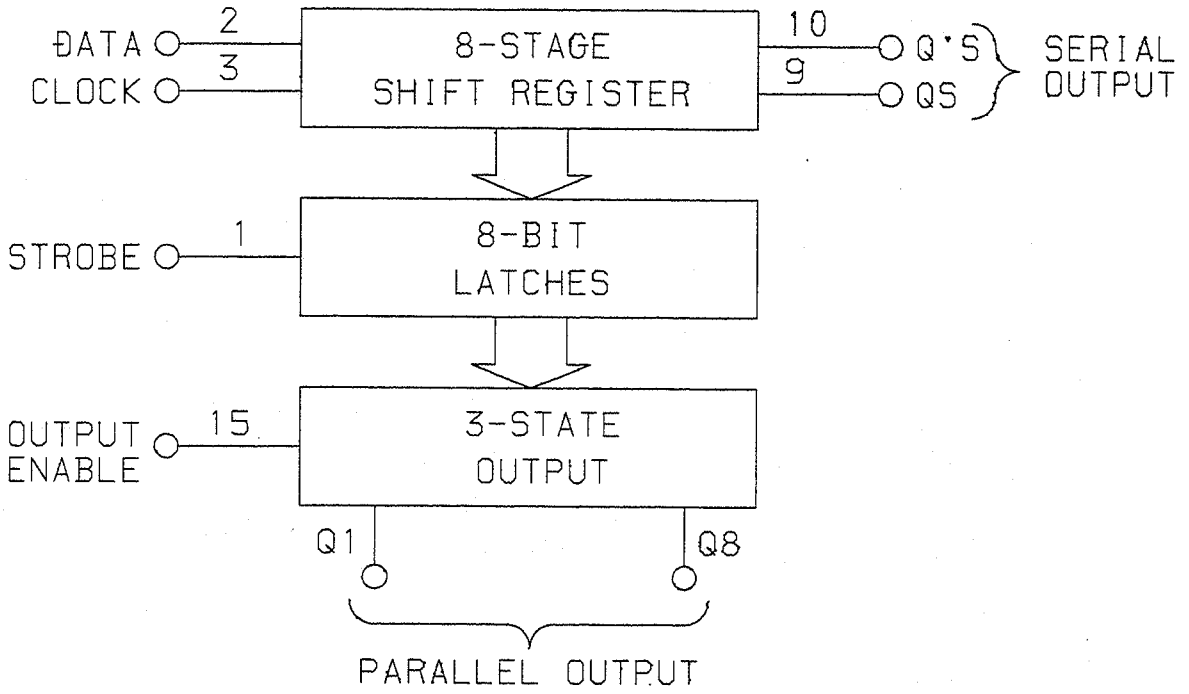


IC, LB1641



IC, CXA1332S



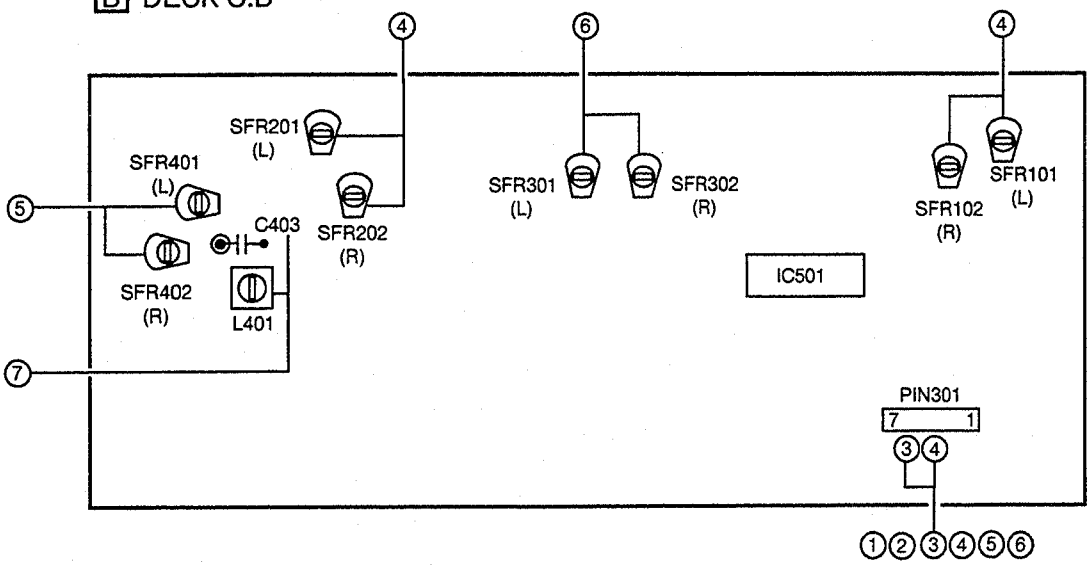


TRUTH TABLE

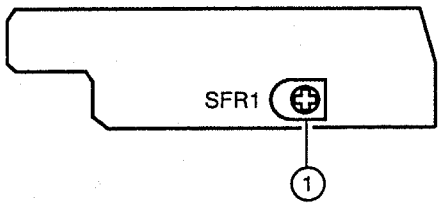
CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUT		SERIAL OUTPUT	
				Q1	Qn	Qs	Q's
↓	L	X	X	Z	Z	Q7	No chg.
↑	L	X	X	Z	Z	No chg.	Qs
↓	H	L	X	No chg.	No chg.	Q7	No chg.
↓	H	H	L	L	Qn−1	Q7	No chg.
↓	H	H	H	H	Qn−1	Q7	No chg.
↑	H	X	X	No chg.	No chg.	No chg.	Qs

Z= High Impedance
X= Don't Care

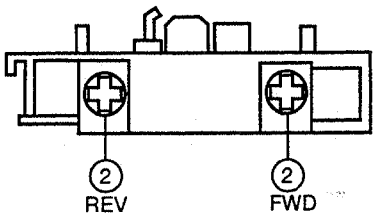
B DECK C.B



D DECK-2 C.B



DECK-1 P, DECK-2 R/P/E HEAD



< TAPE SECTION >

1. Tape Speed Adjustment
   Settings : •Test tape : TTA-100
   •Test point : TP CONN 7P (PIN301) ③,④
   •Adjutment location : SFR1
   Method : Play back the test tape by DECK 2 and adjust SFR1 so that the frequency counter reads 3000Hz ± 40Hz.

2. Head Azimuth Adjustment
   Settings : •Test tape : TTA-310
   •Test point : TP CONN 7P (PIN301) ③,④
   •Adjustment location : Head azimuth adjustment screw
   Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

3. PB Frequency Response Check (DECK1,DECK2)
   Settings : •Test tape : TTA-300
   •Test point : TP CONN 7P (PIN301) ③,④
   Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal is with respect to that of the 315Hz signal is ± 2dB.

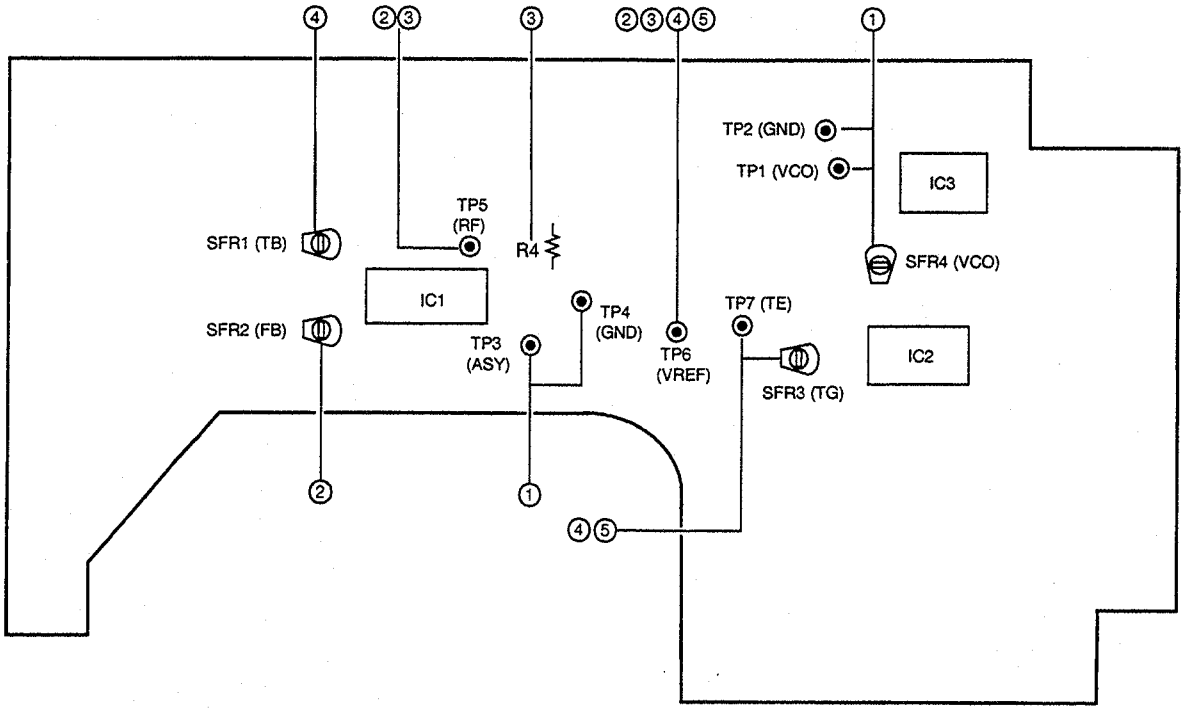
4. PB Sensitivity Adjustment
   Settings : •Test tape : TTA-200
   •Test point : TP CONN 7P (PIN301) ③,④
   •Adjustment location : SFR101 (DECK1, Lch)
   SFR102 (DECK1, Rch)
   SFR201 (DECK2, Lch)
   SFR202 (DECK2, Rch)
   Method : Play back the test tape and adjust SFRs so that the output level of the test point becomes 390mV.

5. REC/PB Frequency Response Adjustment
   Settings : •Test tape : TTA-601
   •Test point : TP CONN 7P (PIN301) ③,④
   •Input signal : 1kHz/10kHz (LINE IN)
   •Adjustment location : SFR451 (Lch)
   SFR452 (Rch)
   Method : Apply 1kHz signal and REC mode. Then adjust OSC attenuator so that the level at the TP CONN 7P (PIN301) ③,④ is 280mV.
   Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of 10kHz signal is + 0.5dB ± 0.5dB with respect to that of the 1kHz signal.

6. REC/PB Sensitivity Adjustment
   Settings : •Test tape : TTA-601
   •Test point : TP CONN 7P (PIN301) ③,④
   •Input signal : 400Hz (LINE IN)
   •Adjustment location : SFR301 (Lch)
   SFR302 (Rch)
   Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the level at the TP CONN 7P (PIN301) ③,④ is 39mV.
   Record and play back the 1kHz and adjust SFRs so that the output is 39mV+0.5dB

7. Bias OSC Frequency Adjustment
   Setting : •Test tape : TTA-601
   •Test point : TP Bias (C403)
   •Adjustment location : L401
   Mehtod: Set to the REC mode, adjust L401 so that the frequency counter of the test point reads 106kHz ± 2kHz.

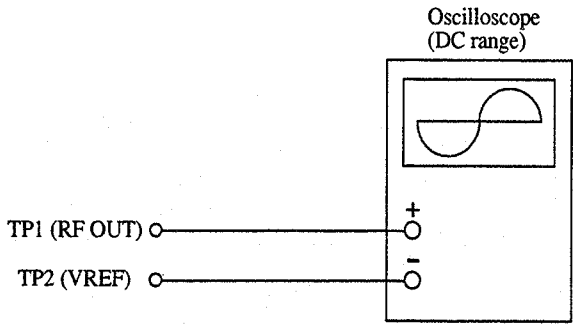
[A] CD C.B



Note :
Connect a probe (10:1) of the osiloscope or the frequency counter to a test point.

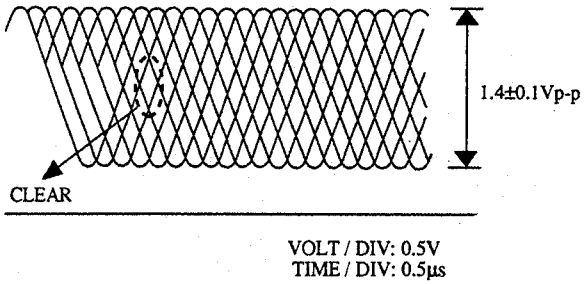
1. VCO Frequency Adjustment
   1) Connect the frequency counter to the test points TP1 (VCO) and TP2 (VCO GND)
   2) Set the test disc and PLAY mode.
   3) Connect and short between TP3 (ASY) and TP4 (GND)
   4) Adjust SFR4 so that the frequency counter reading is 4.27MHz ± 0.02MHz.
   5) After the adjustment is completed, disconnect the short lead wire.

2. Focus Bias Adjustment
   Make the focus bias adjustment when replacing and repairing the optical block.

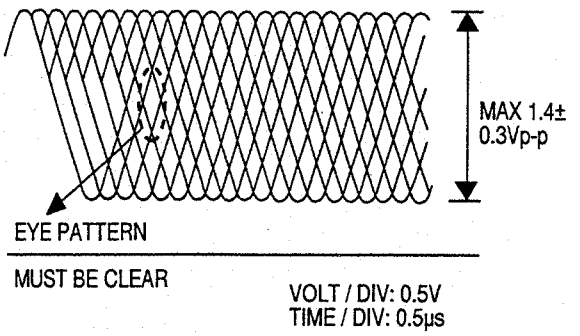


   1) Connect an oscilloscope to the test points TP1 (RF OUT) and TP2 (VREF).
   2) Turn on the power switch.
   3) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
   4) Adjust SFR2 so that RF signal of the test point TP1 (RF OUT) is MAX and CLEARREST.

RF signal waveform

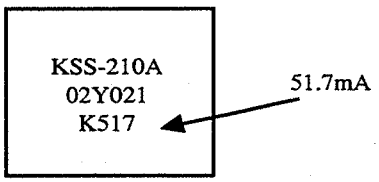


3. RF Waveform Check
   This check should be performed whenever the optical block is replaced in repair.
   1) Connect an oscilloscope to the test points TP5 (RF) and TP6 (VREF).
   2) Turn on the power switch.
   3) Insert the test disc TCD-782 (YEDS-18) and play back the second composition.
   4) Check that the waveform appears as shown in the figure below.



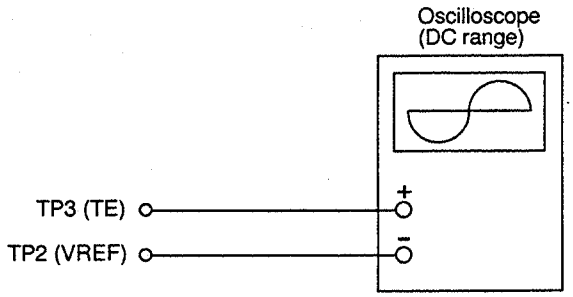
Note:

The current of the laser signal can be checked with th voltage on both sides of R23 (10Ω).The difference for the specified value shown on the level must be within ± 6.0mA

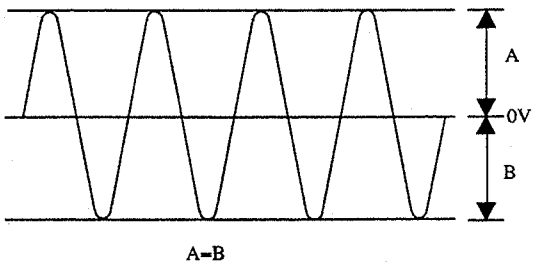


$$\text{Laser current Iop} = \frac{\text{Voltage across R23}}{10\Omega}$$

4. Tracking Balance Adjustment



1) Connect an oscilloscope to the test points TP7 (TE) and TP6 (VREF).
2) Turn on the power switch.
3) Insert test disc TCD-782 (YEDS-18) and press the PLAY button.
4) Connect the intermediate point of SFR3 to TP6 (VREF)
5) Adjust SFR1 (TB) so that the waveform on the oscillo scope is vertically symmetrical as figure shown in the figure below.
6) After the adjustment is completed,remove the connected lead wires from the terminals.



A=B

VOLT / DIV: 200mV
TIME / DIV: 1mS

5. Tracking Gain Adjustment

A servo analyzer is necessary in order to perform this adjustment exactly. However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment. Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when 2-axis device operates. However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise increases when the 2-axis device operates increases.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.

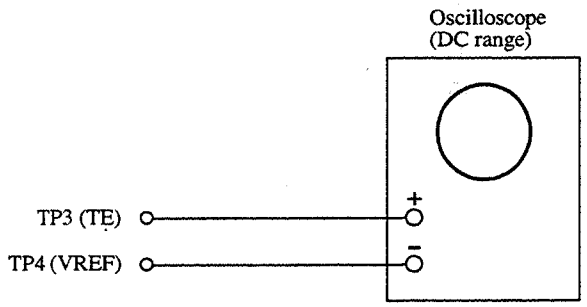
When gain adjustment is off, the symptoms below appear.

Symptoms \ Gain	(Focus)	Tracking
•The time until music starts becomes longer for STOP PLAY or automatic selection (⏮ ⏭ buttons pressed.) (Normally takes about 2 seconds.)	low	low or high
•Music does not start and disc continues to rotate for STOP PLAY or automatic selection (⏮ ⏭ buttons pressed.)	–	low
•Disc stops to rotate shortly after STOP →PLAY.	low or high	–
•Sound is interrupted during PLAY, or time counter display stops.	–	low
•More noises during the 2-axis device opration.	high	high

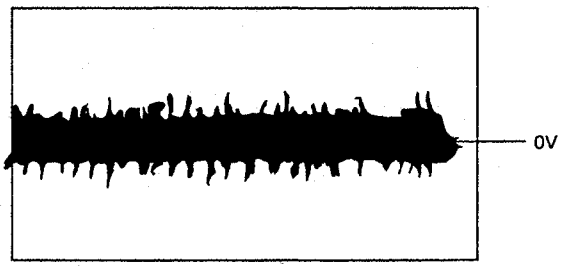
The following is simple adjustment method.

= Simple adjustment =

Note: Since exact adjustment cannot be performed, remember the positions of the controls before the performing the adjustment.
If the positions after the simple adjustment are only a little different, return the controls to the original position.



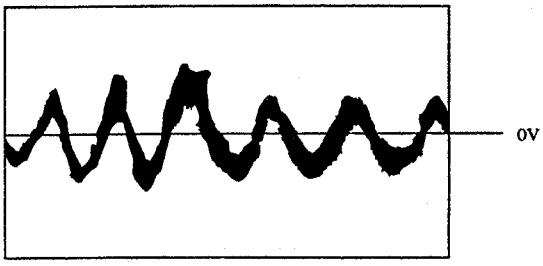
1) Keep the set horizontal. (If the set is not kept horizontally, this adjustment cannot be performed due to the gravity against the 2-axis device.)
2) Insert test disc TCD-782 and play back the second composition.
3) Connect an oscilloscope to TP3 (TE) and TP4 (GND).
4) Adjust SFR3 so that the waveform appears as shown in the figure below.(tracking gain adjustment)



VOLT / DIV: 50mV
TIME / DIV: 1mS

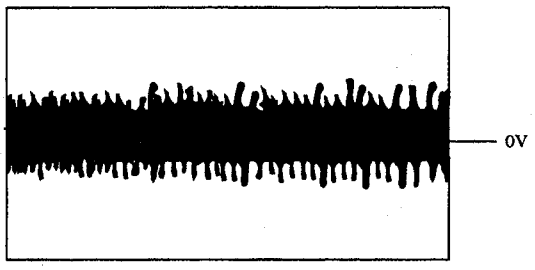
• Incorrect example

Low tracking gain
(The fundamental wave appears as compared with the waveform adjusted)



VOLT / DIV: 50mV
TIME / DIV: 1mS

High tracking gain
(The frequency of the fundamental wave is higher than in low gain)



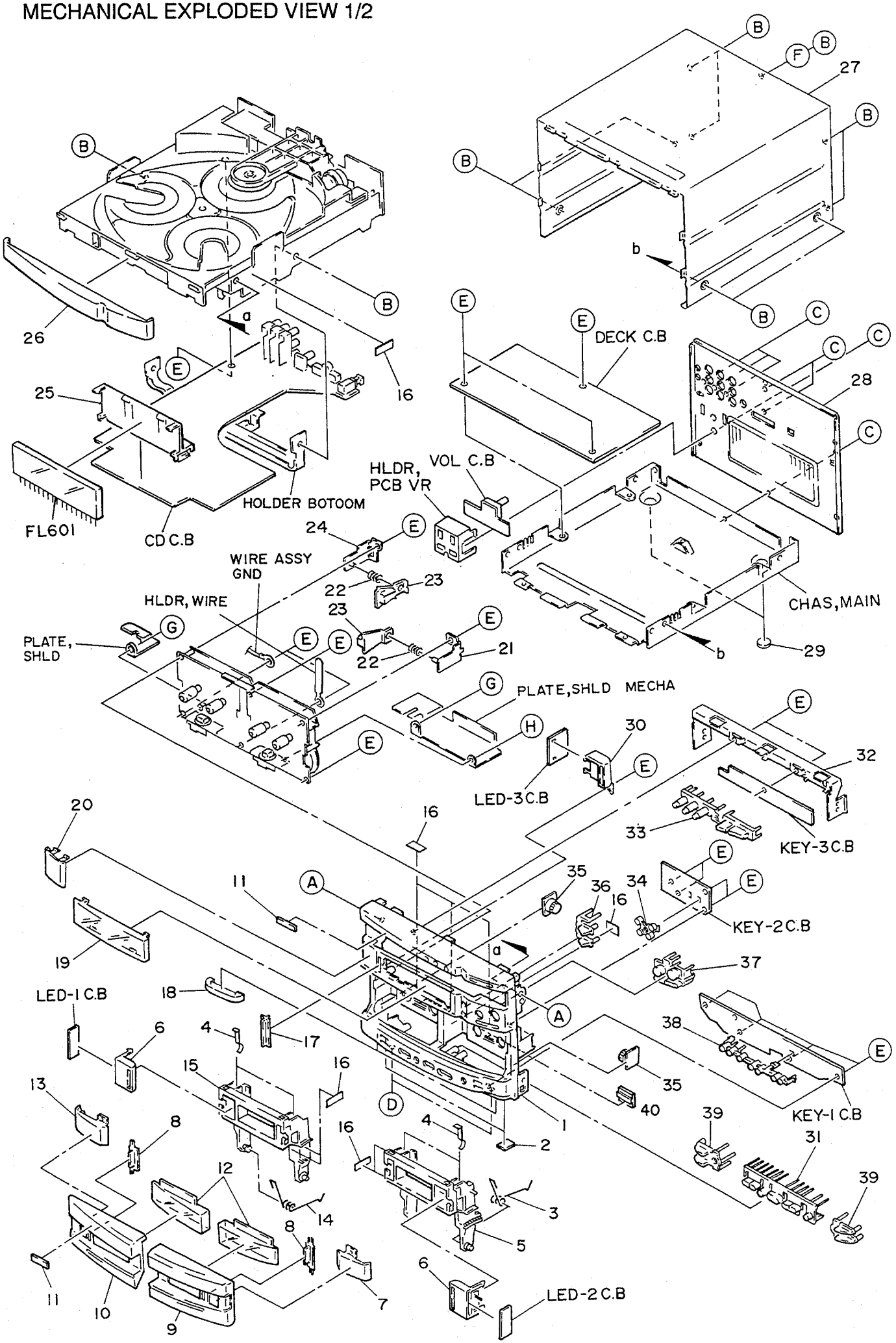
VOLT / DIV: 50mV
TIME / DIV: 1mS

PRACTICAL SERVICE FIGURE

<DECK SECTION>

Tape speed :	3000Hz ± 1.5%
Wow & flutter :	Less than 0.4% (R.M.S)
Take-up torque :	45g-cm - 5g-cm (FWD, REV)
F.F torque :	100g-cm +50/-25 g-cm
REW torque :	100g-cm +50/-25 g-cm
Back tension :	3g-cm ± 4g-cm (FWD, REV)
PB Output level :	220mV ± 50mV
REC/PB Output level :	130mV ± 2dB (SP OUT)
Distortion (REC/PB) :	Less than 2.5% (METAL)
Noise level (PB) :	Less than 1.0mV
	(DOLBY B/C ON, CRO2)
	Less than 1.3mV
	(DOLBY B/C OFF, NORM)
Noise level (REC/PB) :	Less than 1.2mV
	(DOLBY B/C ON, CRO2, METAL)
	Less than 1.3mV
	(DOLBY B/C , NORM)
Erasing ratio :	More than 60dB
Test tape :	NORMAL TTA-601/600
	CrO2 TTA-610
	METAL TTA-630

MECHANICAL EXPLODED VIEW 1/2

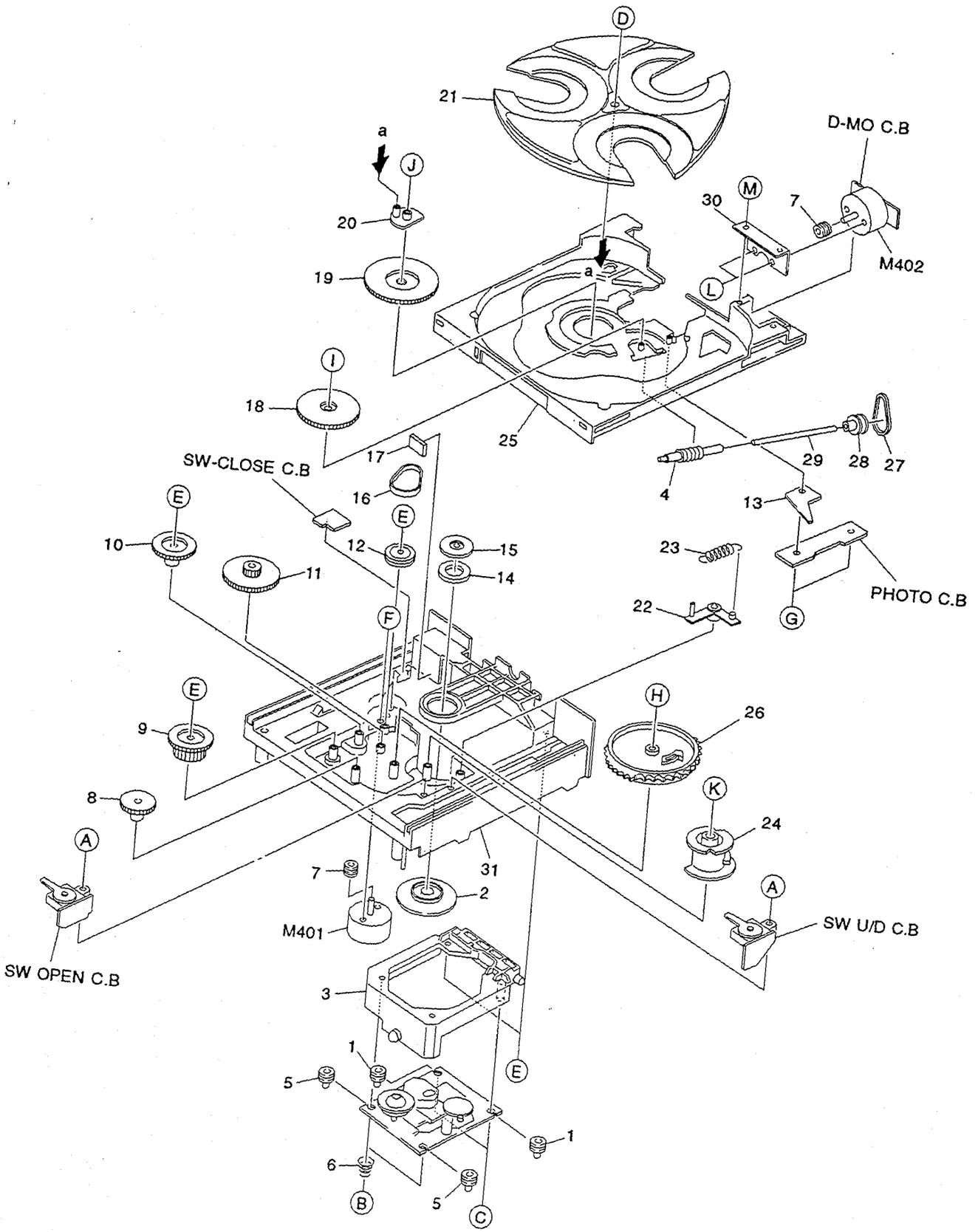


MECHANICAL PARTS LIST 1/2

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	85-NV1-001-019		CAB,FR<YJ,YL,Y>
1	85-NV1-002-019		CAB,FR(U)<YU>
2	80-VT1-202-019		FELT,12.5-15.5-2
3	82-NV1-217-119		SPR-T,EJECT R (SIN)
4	80-CD3-218-110		SPR-P CASS
5	82-NV1-004-119		BOX,CASS R
6	82-NV1-204-019		GUIDE,LED CASS
7	82-NV1-024-019		DUMMY,CASS R
8	82-NV1-019-019		IND,CASS
9	85-NV1-004-019		PANEL,CASS R
10	85-NV1-003-019		PANEL,CASS L
11	81-MX4-032-019		BADGE,AIWA N
12	83-NV1-008-019		WINDOW,CASS
13	82-NV1-023-019		DUMMY,CASS L
14	82-NV1-216-119		SPR-T,EJECT L (SIN)
15	82-NV1-003-119		BOX,CASS L
16	80-MQ1-209-019		CLOTH,20-7
17	82-NV1-018-019		IND,CD
18	82-NT1-036-019		RING,FOOT
19	82-NV1-016-019		WINDOW,CD
20	82-NV1-022-019		DUMMY,CD
21	82-NF5-227-019		HLDR,LOCK 2N
22	82-NF5-228-019		SPR-C,LOCK
23	82-NF5-229-019		PLATE,LOCK
24	82-NF5-226-019		HLDR,LOCK 1N
25	81-VM1-203-019		GUIDE,FL
26	85-NV1-005-019		PANEL,TRAY
27	82-NV1-002-119		CAB,STEEL
28	85-NV1-009-019		PANEL,REAR YBN<Y>
28	85-NV1-008-019		PANEL,REAR YJBN<YJ>
28	85-NV1-013-019		PANEL,REAR YLBN<YL>
28	85-NV1-010-019		PANEL,REAR YUBN<YU>
29	82-NV1-213-019		FELT,DIA12-2
30	82-NV1-205-019		GUIDE,LED WIND
31	82-NV1-010-019		KEY,DECK
32	82-NV1-201-019		HLDR,FR
33	82-NV1-008-019		KEY,OPEN
34	82-NV1-202-019		GUIDE,LED CD
35	87-063-165-019		OIL-DMPR 150
36	85-NV1-006-019		KEY,DISPLAY
37	82-NV1-009-01K		KEY,CD
38	82-NV1-203-019		GUIDE,LED DECK
39	85-NV1-007-019		KEY,DUBB
40	87-020-109-010		LED,SLF-201C
A	87-721-096-419		QT2+3-10
B	87-067-641-019		UTT2+3-8 W/O SLOT BLK
C	87-067-660-019		BVT2+3-8W/O SLOT BLK
D	87-067-689-019		BVTT+3-8
E	87-067-579-019		BVT 2+3-8 W/O SLOT
F	87-067-058-019		FW,3.2-8-0.5
G	87-571-032-419		VIT+2-3
H	87-067-178-019		VTT+2.6-3

MECHANICAL EXPLODED VIEW 2/2

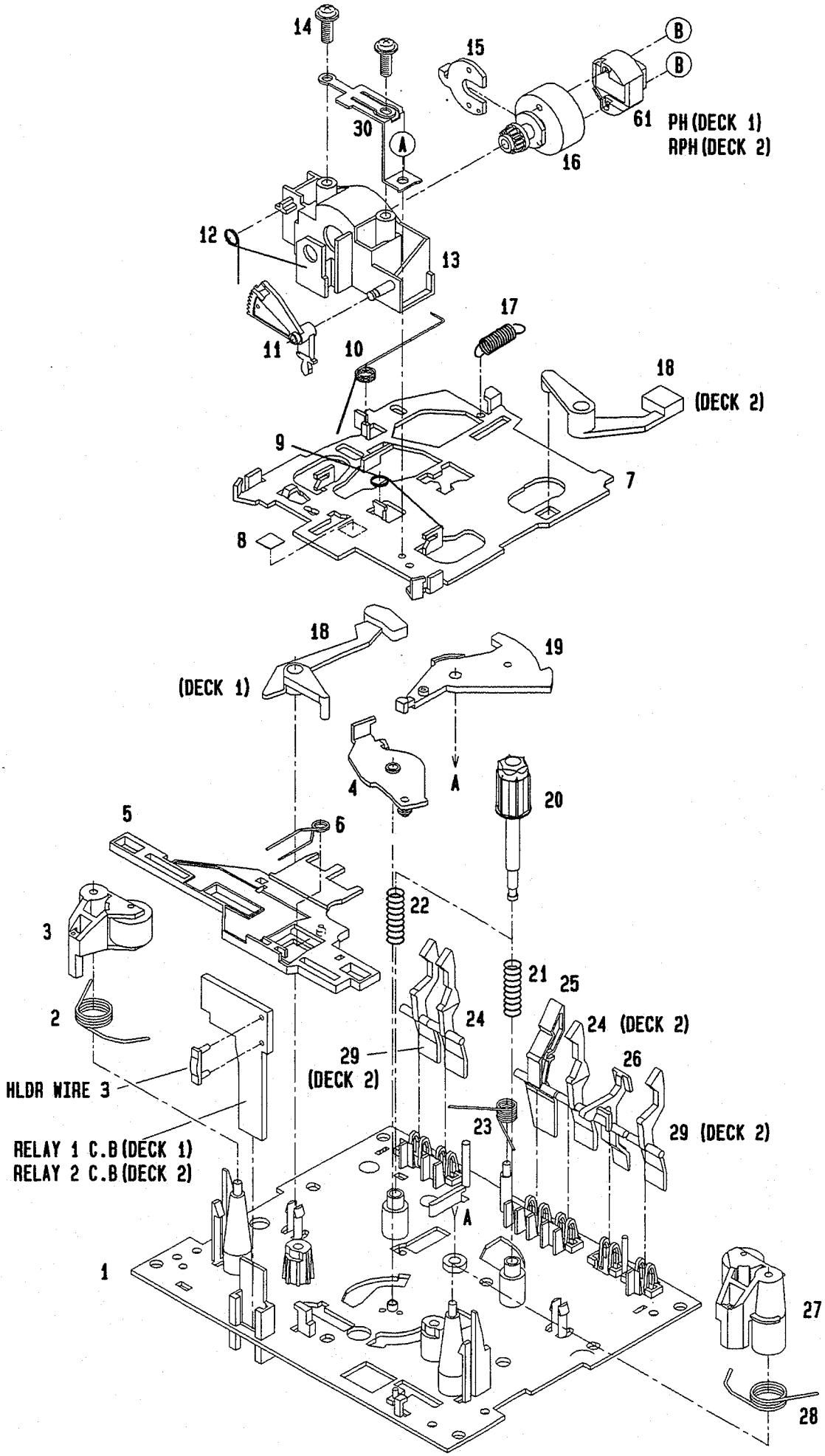


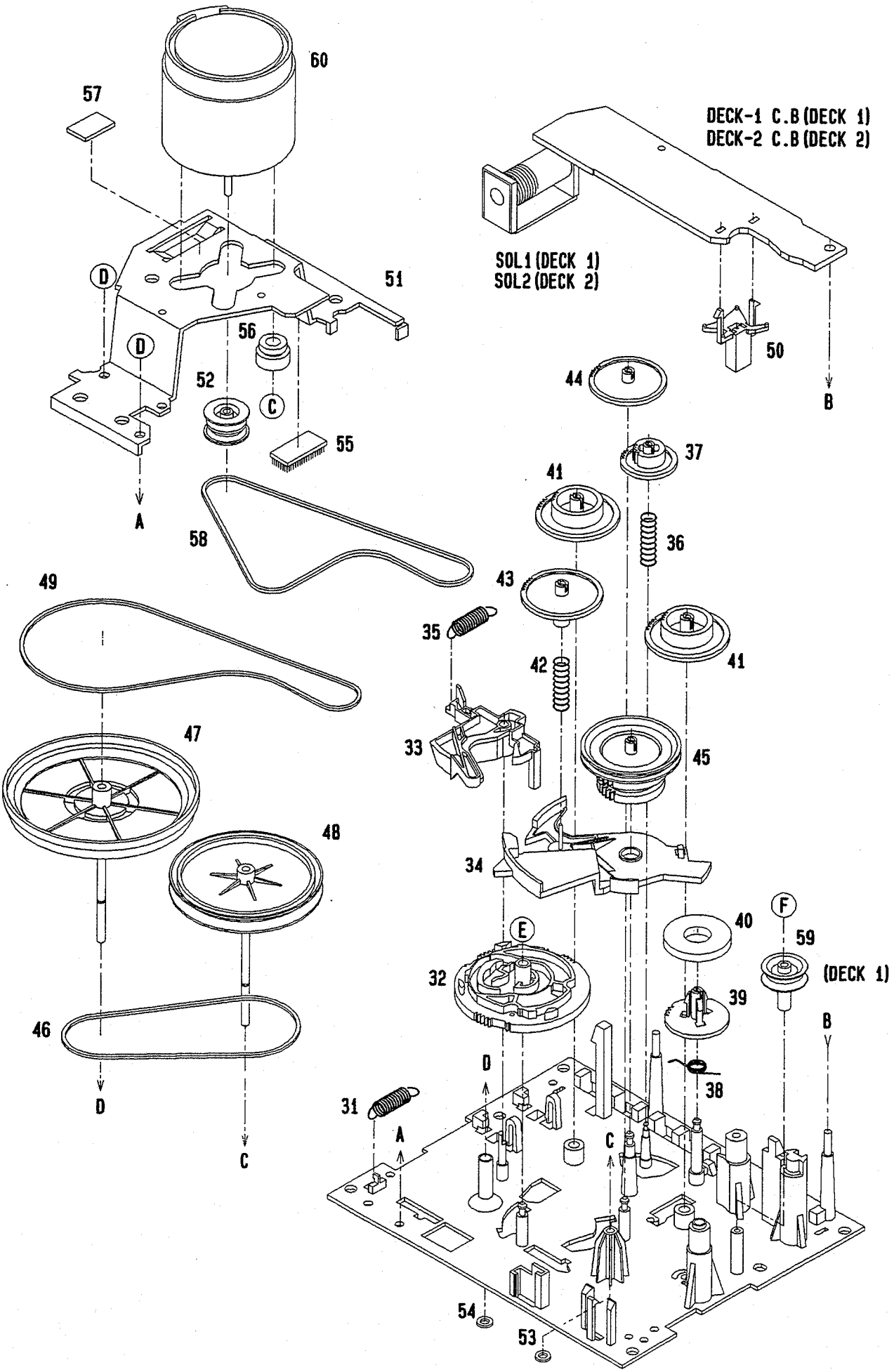
MECHANICAL PARTS LIST 2/2

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	80-CD3-214-019		CUSH CD A
2	81-ZG1-228-21K		HLDR,MAGNET
3	81-ZG1-253-519		HLDR,MECH MK2
4	81-ZG1-276-11K		WORM GEAR,TT NO2
5	81-ZG1-230-010		G-CUSH,MECH
6	81-ZG1-231-110		SPR-C,MECH
7	81-ZG1-212-01K		PULLY,LOAD MO
8	81-ZG1-250-019		GEAR TRAY RELAY MK2
9	81-ZG1-019-019		GEAR TRAY B YEL
10	81-ZG1-018-019		GEAR TRAY A YEL
11	81-ZG1-017-019		GEAR RELAY RED
12	81-ZG1-014-01K		PULLY,RELAY YEL
13	81-ZG1-240-010		SPR-P,WORM
14	87-036-326-010		MAGNET,CLAMPER 93
15	81-ZG1-255-119		PLATE,MAGNET MK2
16	81-ZG1-232-010		BELT,TRAY
17	81-ZG1-238-119		CUSH,TRAY IN
18	81-ZG1-222-01K		WORM WHEEL,TT
19	81-ZG1-202-01K		GEAR,MAIN
20	81-ZG1-252-010		LEVER,TT MK2
21	81-ZG1-010-219		TURNTABLE NO3
22	81-ZG1-020-019		PLATE,CAM BGE
23	81-ZG1-262-019		SPR-E CAM S
24	81-ZG1-016-01K		GEAR,MECH CAM BGE
25	81-ZG1-029-019		TRAY,NO2 MOT
26	81-ZG1-015-01K		GEAR,TRAY CAM BLU
27	81-ZG1-233-110		BELT,TT
28	81-ZG1-236-01K		PULLY,TT MO
29	81-ZG1-260-019		SHAFT,WORM S
30	81-ZG1-215-11K		HLDR,MOTOR
31	81-ZG1-267-219		CHAS,MECH M(NO3)
A	81-653-215-019		SPECIAL SCREW VT2
B	81-ZG1-254-019		S-SCEW,MECH HLDR
C	81-ZG1-271-019		S-SCREW,MECH REAR
D	81-ZG1-239-019		S-SCREW,TT
E	87-067-945-119		VFT2+3-12(F10)
F	87-251-071-419		U+2.6-4
G	87-067-579-019		BVT 2+3-8 W/O SLOT
H	81-ZG1-264-019		S-SCREW,CAM
I	87-761-095-419		VFT2+3-8W/O SLOT GOLD
J	87-078-029-019		VFT2+3-13(F8)
K	87-078-061-019		VFT2+3-20DIA10,GLD
L	87-251-070-419		U+2.6-3
M	87-721-097-419		QT2+3-12 GLD

TAPE MECHANISM EXPLODED VIEW 1/1



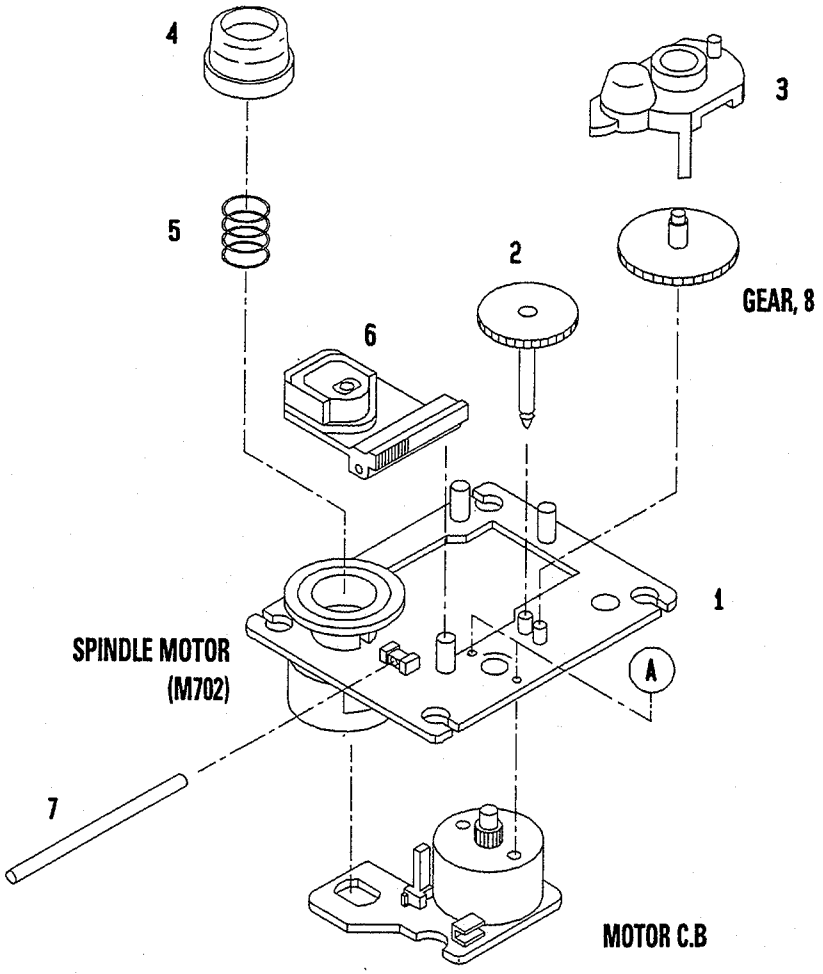

60
57
51
56
52
55
58
DECK-1 C.B (DECK 1)
DECK-2 C.B (DECK 2)
SOL1 (DECK 1)
SOL2 (DECK 2)
50
44
37
41
36
43
35
42
41
49
47
33
45
48
34
40
59
(DECK 1)
32
39
46
38
31
54
53
A
B
C
D
E
F

TAPE MECHANISM PARTS LIST 1/1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-214-110		CHAS ASSY,P (DECK 1)
1	82-ZM1-299-010		CHAS ASSY,R (DECK 2)
2	82-ZM1-258-010		SPR-T,PINCH L
3	82-ZM1-248-110		LVR ASSY,PINCH L
4	82-ZM1-295-210		PLATE ASSY,LINK
5	82-ZM1-266-010		LVR,DIR
6	82-ZM1-214-010		SPR-T,DIR
7	82-ZM1-206-210		CHAS,HEAD
8	87-078-014-010		SH,5-5-0.05
9	82-ZM1-269-010		SPR-T,BRG
10	82-ZM1-219-010		SPR-T,LINK
11	82-ZM1-210-010		GEAR,H T
12	82-ZM1-213-010		SPR-T,HEAD
13	82-ZM1-207-010		GUIDE,TAPE
14	82-ZM1-283-210		S-SCREW,AZIMUTH
15	82-ZM1-209-010		PLATE,HEAD
16	82-ZM1-208-010		HLDR,HEAD
17	82-ZM1-218-010		SPR-E,HB
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)
19	82-ZM1-222-010		LVR,PLAY
20	82-ZM1-217-110		REEL TABLE
21	82-ZM1-244-110		SPR-C,BT
22	82-ZM1-285-110		SPR-C,BT L
23	82-ZM1-257-010		SPR-T,CAS
24	82-ZM1-241-110		LVR,MC
25	82-ZM1-242-010		LVR,CAS
26	82-ZM1-243-010		LVR,STOP
27	82-ZM1-253-110		LVR ASSY,PINCH R
28	82-ZM1-259-010		SPR-T,PINCH R
29	82-ZM1-240-110		LVR,REC (DECK 2)
30	82-ZM1-298-010		SPR-P,EARTH
31	82-ZM1-255-110		SPR-E,LVR DIR
32	82-ZM1-221-110		GEAR,CAM
33	82-ZM1-227-110		LVR,TRIG
34	82-ZM1-224-110		LVR,FR
35	82-ZM1-305-010		SPR-E,TRIG 2
36	82-ZM1-277-010		SPR-C,PLAY
37	82-ZM1-223-010		GEAR,PLAY
38	82-ZM1-256-110		SPR-T,FR
39	82-ZM1-220-210		GEAR,IDLER
40	80-ZM6-217-010		RING MAGNET 2
41	82-ZM1-216-210		GEAR,REEL
42	82-ZM1-276-010		SPR-C,FR
43	82-ZM1-225-010		GEAR,FR
44	82-ZM1-226-010		GEAR,REW
45	82-ZM1-228-210		SLIP DISK ASSY
46	82-ZM1-261-110		BELT,FR
47	82-ZM1-237-210		FLY-WHL ASSY,R (DECK 2)
47	82-ZM3-209-110		FLY-WHL ASSY,R2 (DECK 1)
48	82-ZM1-234-110		FLY-WHL ASSY,L (DECK 2)
48	82-ZM3-207-210		FLY-WHL ASSY,L2 (DECK 1)
49	82-ZM3-206-010		BELT,R
50	82-ZM1-245-210		HLDR,IC
51	82-ZM3-201-010		HLDR,MC
52	82-ZM3-202-010		PULLEY,MOT 2M
53	82-ZM1-288-010		SH,1.63-3.2-0.5 SLT
54	80-ZM6-243-010		SH,1.75-3.6-0.5 SLT
55	80-ZM6-230-010		SH,BELT
56	86-575-242-010		CUSH-G,DIA3.7-9-3.2
57	86-575-361-010		CUSH-G,6-8-0.8
58	82-ZM3-205-010		BELT,L
59	82-ZM3-204-010		PULLEY,COUPLER (DECK 1)
60	87-045-347-010		MOT,SHU2L 70(M1)
61	87-046-355-010		HEAD,PH HADKH2529B(PH)
61	87-046-356-010		HEAD,RPH HADKH5581B(RPH)
A	87-585-036-410		UIT+2-8
B	80-ZM6-207-010		V+1.6-7
C	82-ZM1-309-010		S-SCRW,MOTOR
D	87-067-178-010		VTT+2.6-3
E	87-067-932-010		PW,2.15-6.8-0.5 SLT
F	87-067-972-010		PW,1.05-3-0.25 SLT

CD MECHANISM EXPLODED VIEW 1/1

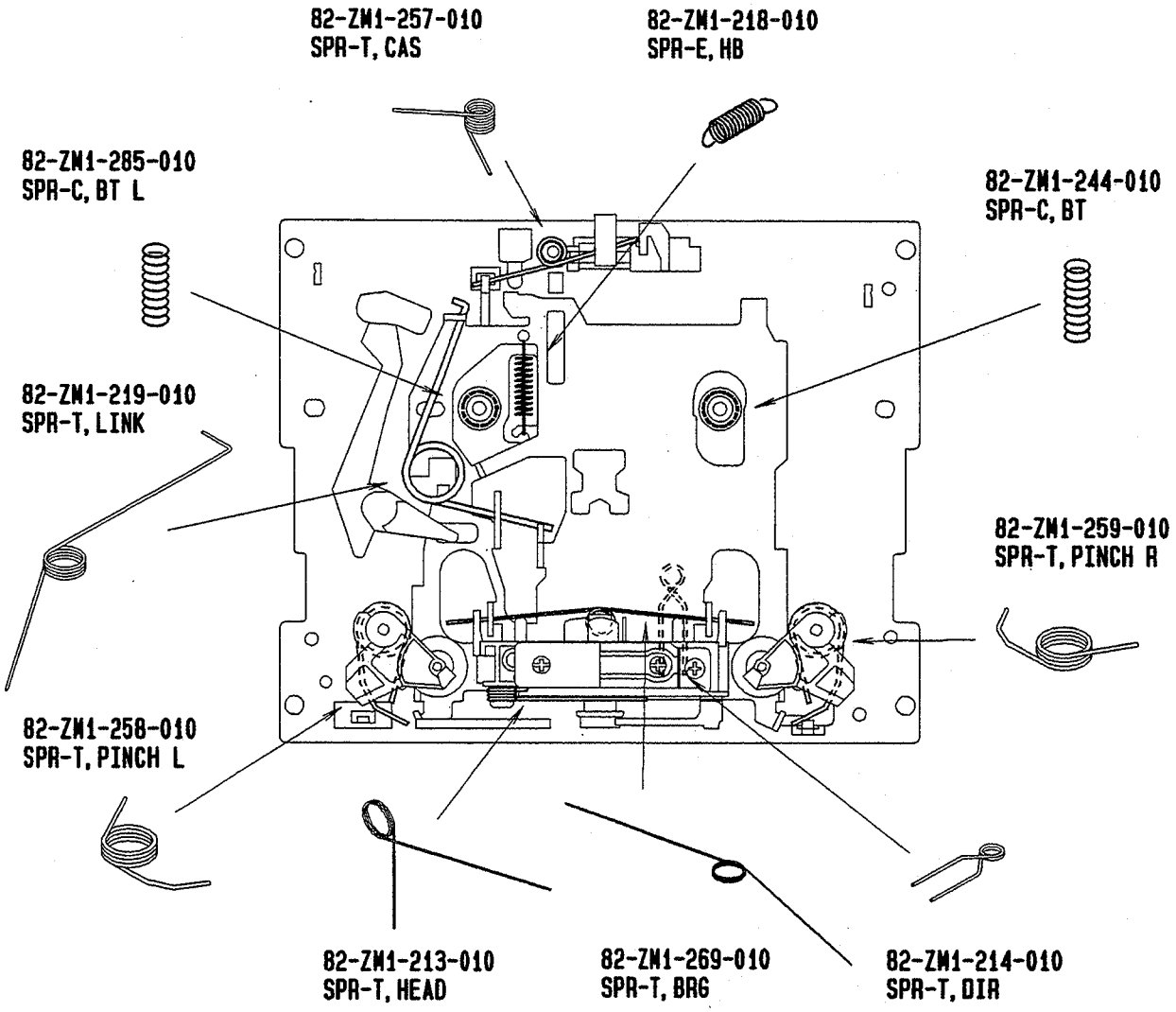


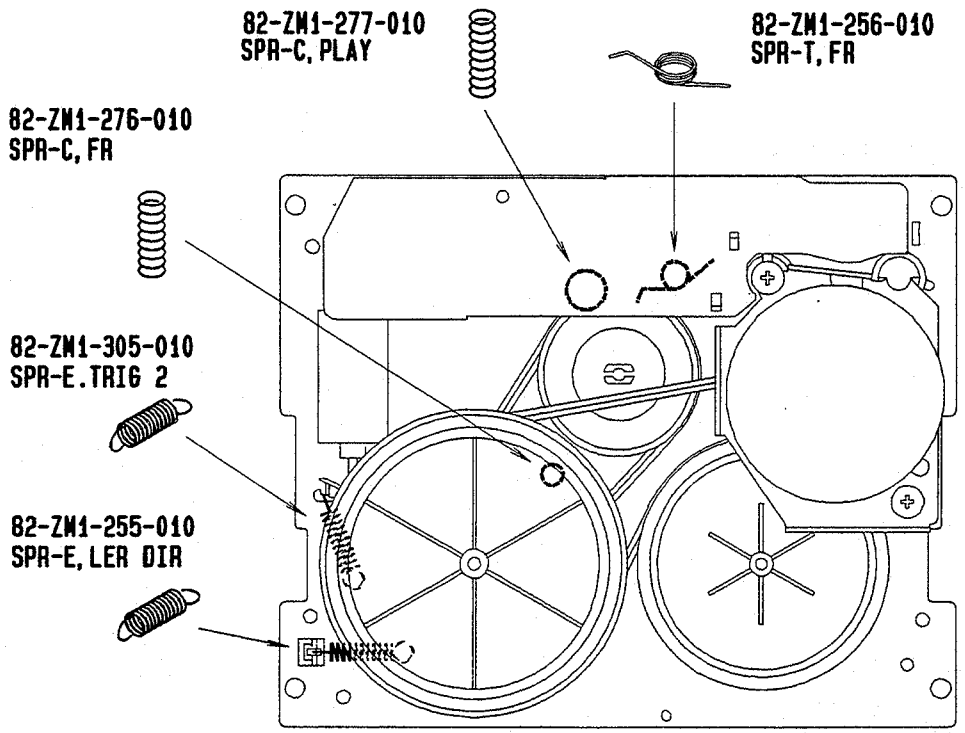
CD MECHANISM PARTS LIST 1/1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	9X-262-513-310		T.T CHASS ASSY W/MOTOR
2	92-625-188-020		GEAR(A)
3	92-625-544-010		COVER
4	92-625-187-010		RING CENTER
5	92-625-191-010		SPRING COMPRESSION
6	98-848-127-110		OPTICAL PICK UP KSS-210A
7	94-917-565-010		SHAFT SLED
A	87-261-032-210		V+2-3

SPRING APPLICATION POSITION





SPEAKER PARTS LIST 1/1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	85-NS1-011-019		GRILL FRAME ASSY
2	85-NS1-602-019		SPEAKER WOOFER<EXCEPT YL>
2	85-NS1-604-019		SPEAKER WOOFER H<YJ,YU>
3	83-NSD-608-019		SPEAKER TWEETER
4	85-NS1-001-019		PANEL FR
5	85-NS1-004-019		RING W
6	85-NS1-010-019		PANEL TW ASSY
7	83-096-614-019		SPEAKER CORD
8	82-NS2-610-019		TERMINAL ASSY
9	87-343-172-019		UT,+4-12
10	87-342-097-019		UT,+3-12

ACCESSORIES/PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	85-NT1-901-119		IB,EAC-S<HE,HK,HR>
1	85-NT1-902-119		IB,ESF-S<LH,U>
1	85-NT1-903-019		IB,EGI-S<EE,EZ,EEZ>
1	85-NT1-904-019		IB,ESF(E)-S<EE,EZ,EEZ,K>
2	85-NT1-019-019		RC-T502
3	87-006-225-019		AM LOOP ANT NC2
4	87-009-789-019		PLUG ADPTR IR44<HE,LH,HR>
5	85-043-115-01B		ANT,FEEDER FM<HE,LH,HR,HK,U>
6	87-043-106-019		FM, WIRE ANT (Z)<EE,EZ,EEZ,K>

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL